

# Winter Weather



**Marcia Cronic**

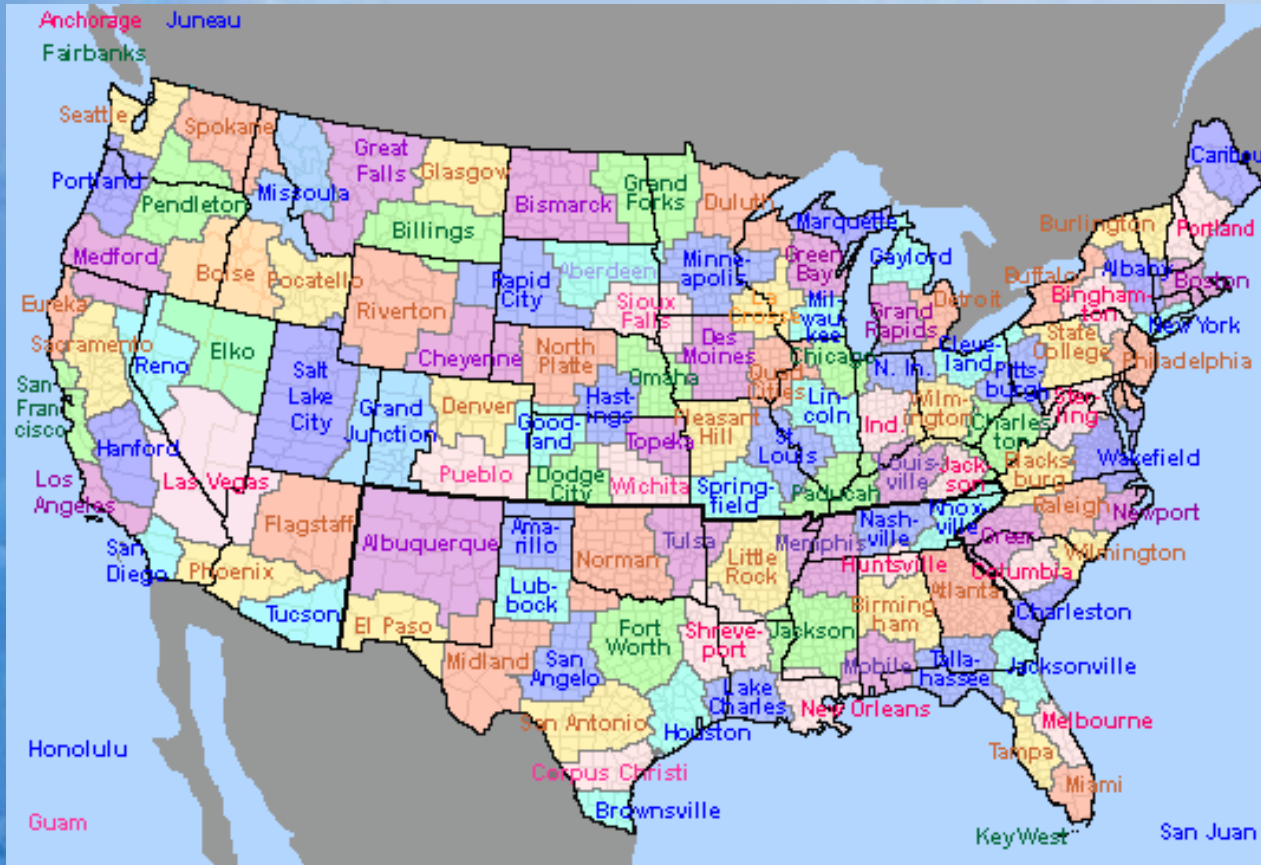
**Ed Townsend**

**Steve Brueske**

**National Weather Service**

**Milwaukee/Sullivan**

# NWS: A Federal Government Agency

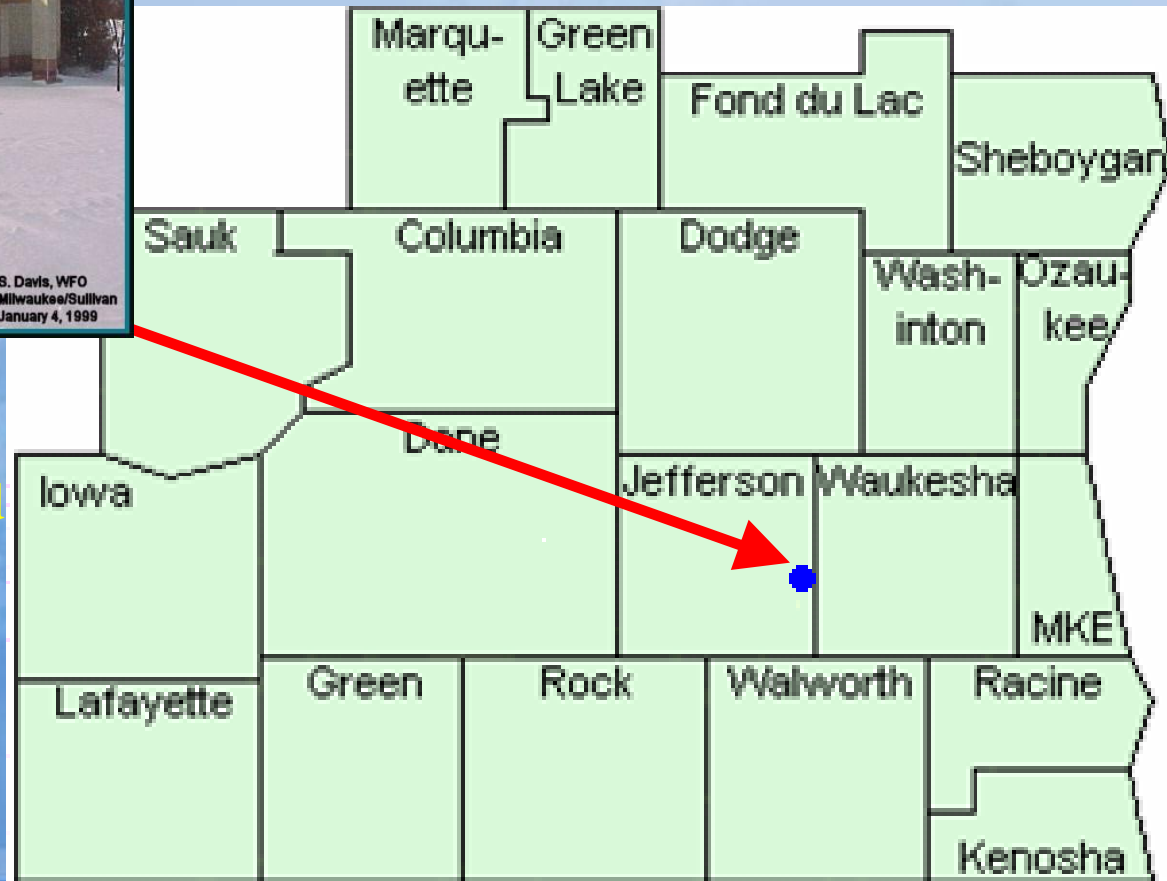




# WFO Milwaukee/Sullivan



Watch/Warning responsibility  
for 20 counties in southeast and  
south-central Wisconsin.



# Goals of the Presentation

- Precipitation Type, Amount, Timing
- Radar Interpretation
- Know where to find additional weather information (WI DOT, websites)



# Basic Weather Concepts



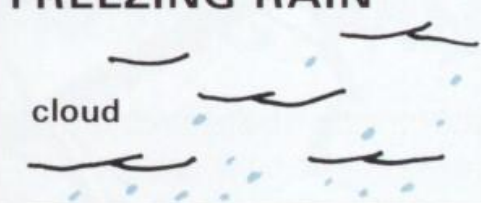



- Low Pressure Systems
  - Alberta Clippers
  - Colorado Lows
- Lake Effect Snow
- Precipitation Type
- Snow Ratios → Snowfall Amounts

Winter Wx Hazards  
Snow, Sleet, Ice,  
Wind, Blowing Snow,  
Fog





# What Kind of Precipitation?

<b>SNOW</b>  cloud	28°  29°	<b>SLEET</b>  cloud	<b>FREEZING RAIN</b>  cloud
	30°  31°  31°  30°		
Cloud temperature is cold enough for snow to form; air above the ground does not melt it.	30°	Rain freezes to ice pellets which do not stick to surfaces, but accumulate on the ground.	Glaze of ice forms over surfaces.



# Precipitation Type



## Rain

Frozen precipitation  
melts into rain

## Freezing Rain

Frozen precipitation  
melts in warm air...  
...rain falls and freezes on  
cold surfaces as a sheet of ice

## Sleet

Frozen precipitation  
melts...  
...refreezes into sleet  
before hitting ground

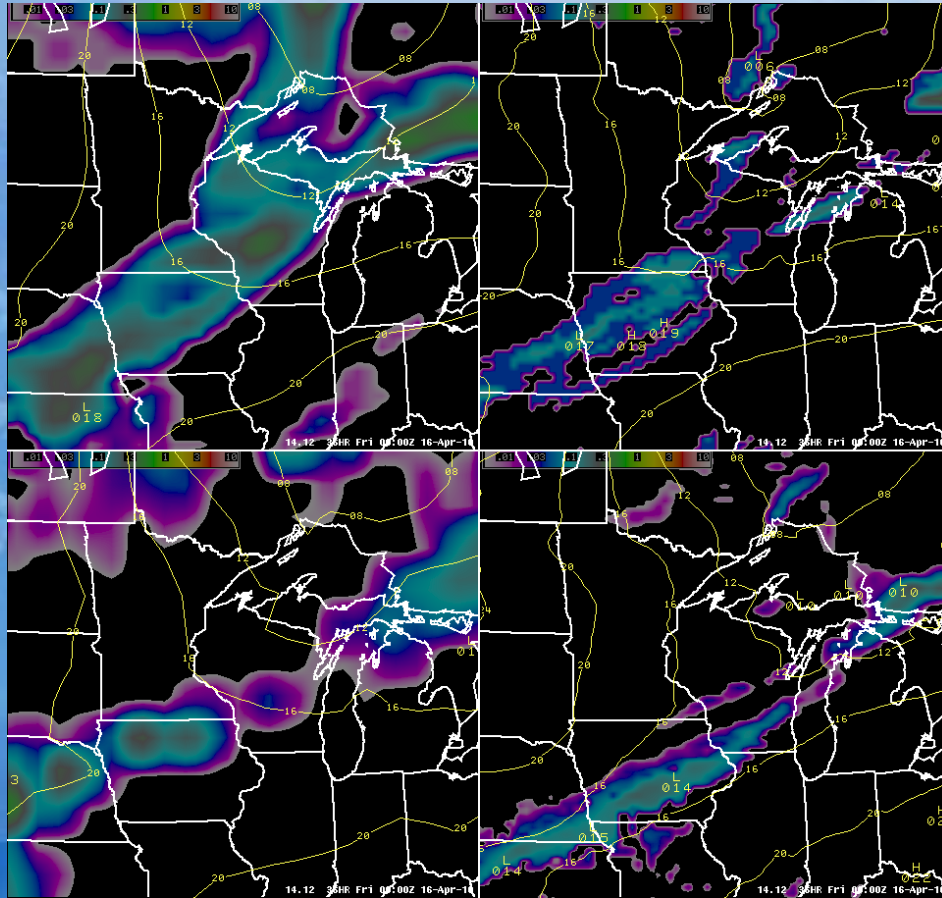
## Snow

Snow falling into  
cold air never melts



# How Much Snow?

- We obtain model quantitative precipitation forecasts (QPF)





# How Much Snow?

- We obtain model quantitative precipitation forecasts (QPF)
- Use this quantity to estimate liquid equivalent over a 6-hour period
- Convert liquid equivalent amount to snowfall total

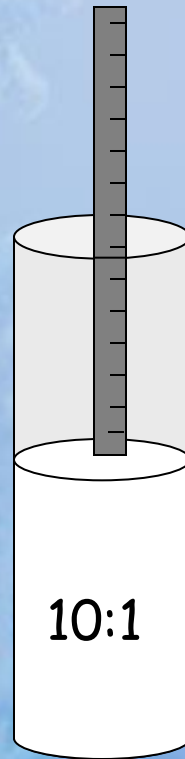
How do we know the conversion?



# Snow to Liquid Ratio



Rain/snow  
Gauge

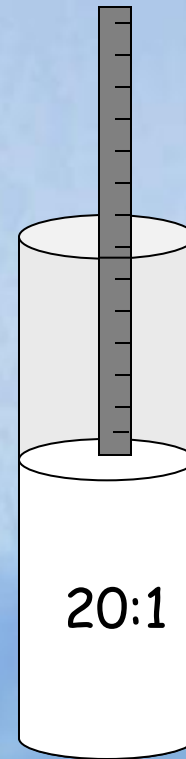


5"  
snow



0.5"  
precip

Colorado Low



5"  
snow



0.25"  
precip

Alberta Clipper







# Radar Interpretation

# How Radar Works

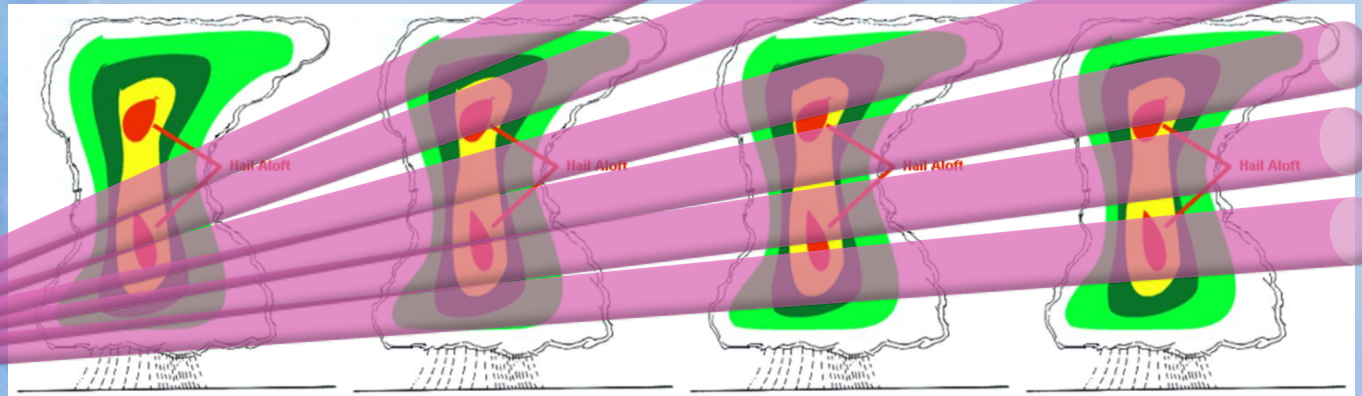




# How Radar Works



# How Radar Works

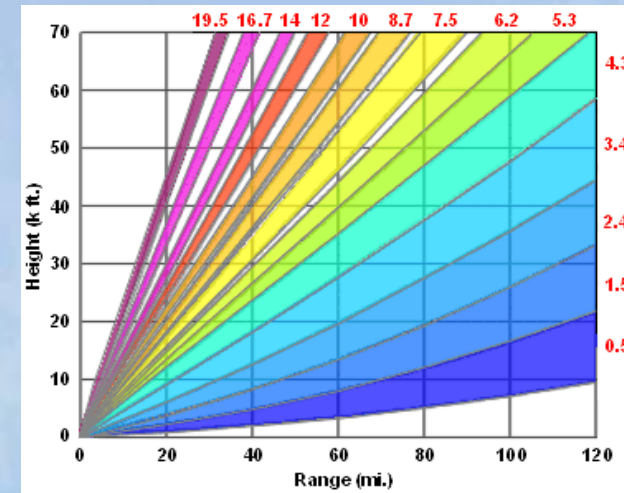
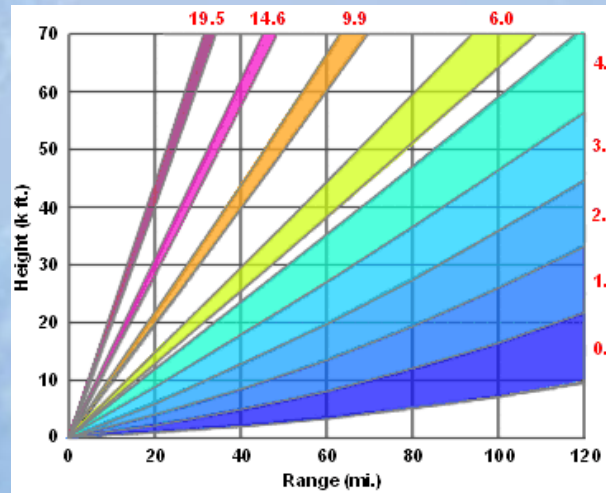
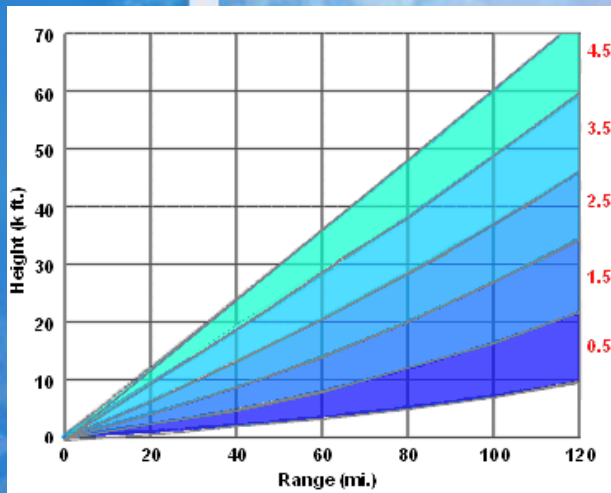


Base  
Reflectivity





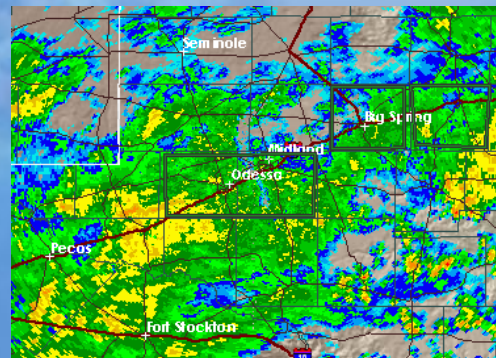
# Radar Sampling Patterns



Clear Air Mode

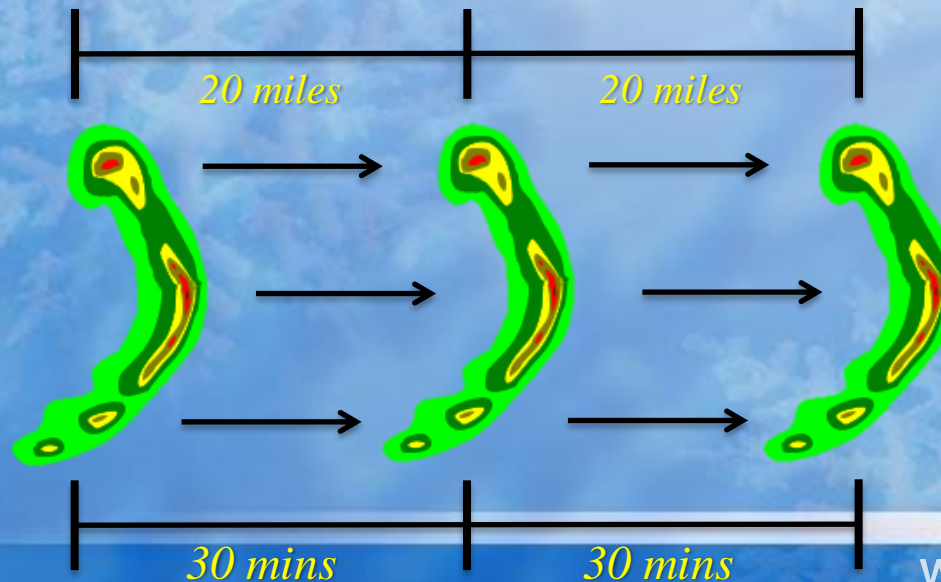
Precip Mode

Storm Mode



# Radar

- How to figure timing or onset of precip using radar
- Use time of radar and your fingers
- Look out your window for “calibration”







NWS radar Image from Milwaukee, WI



# Milwaukee, WI Radar

Go to: [Enhanced Version](#)

Local weather forecast by "City, St"

[Radar Status Message](#)

## Adjacent Radars:



## Short Range Images

Reflectivity:

Composite    Loop  
Base            Loop

Velocity:

Storm Relative    Loop  
Base                Loop

Rainfall:

1-Hour Total    Loop  
Storm Total    Loop

## Long Range Images

Reflectivity:

Base            Loop

## U.S. Views

Reflectivity:

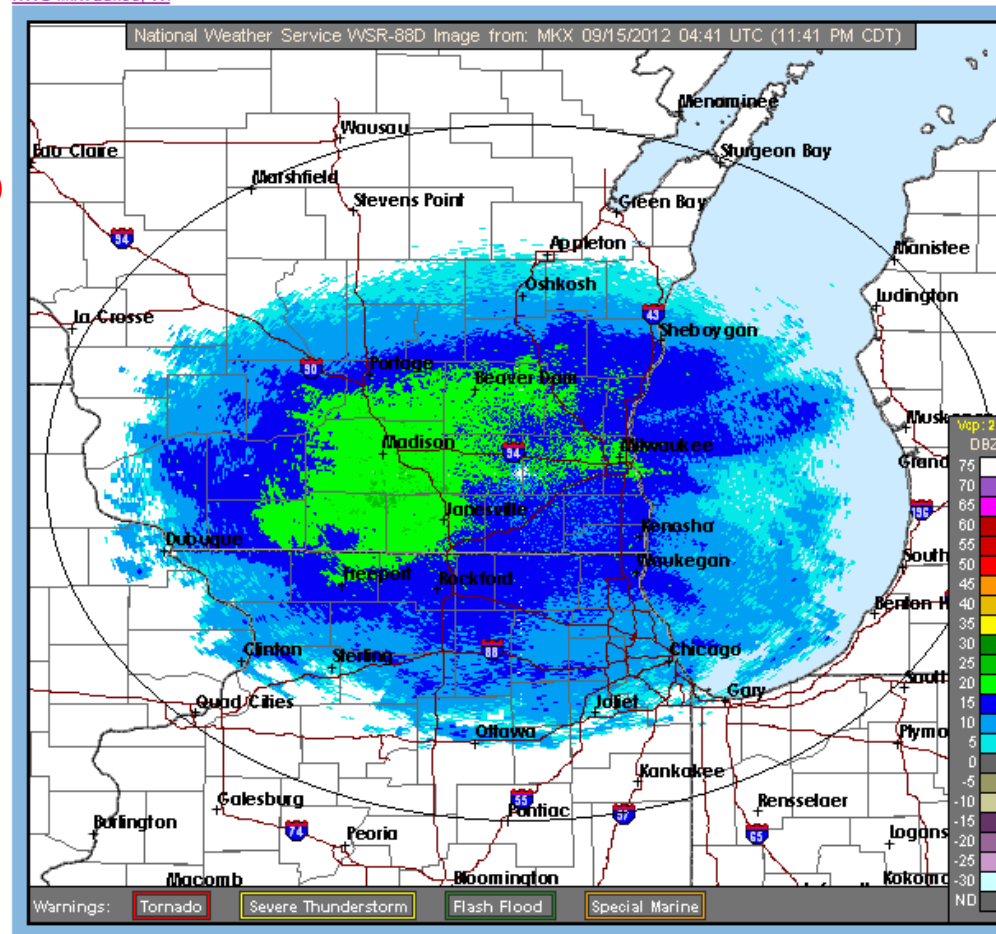
National        Loop  
Alaska         Loop  
Hawaii         Loop  
Guam            Loop  
Puerto Rico    Loop  
Radars by State

## Additional Info:

[Radar FAQ](#)  
[Downloading Images](#)  
[Mobile Users](#)  
[GIS Users](#) **KML**  
[Doppler University](#)  
[Color Blindness Tool](#)  
[Credits](#)

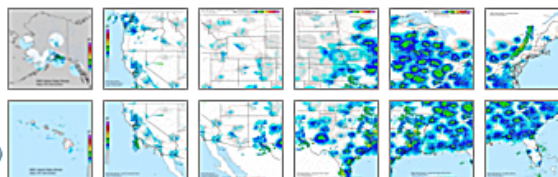
## Base Reflectivity

[NWS Milwaukee, WI](#)



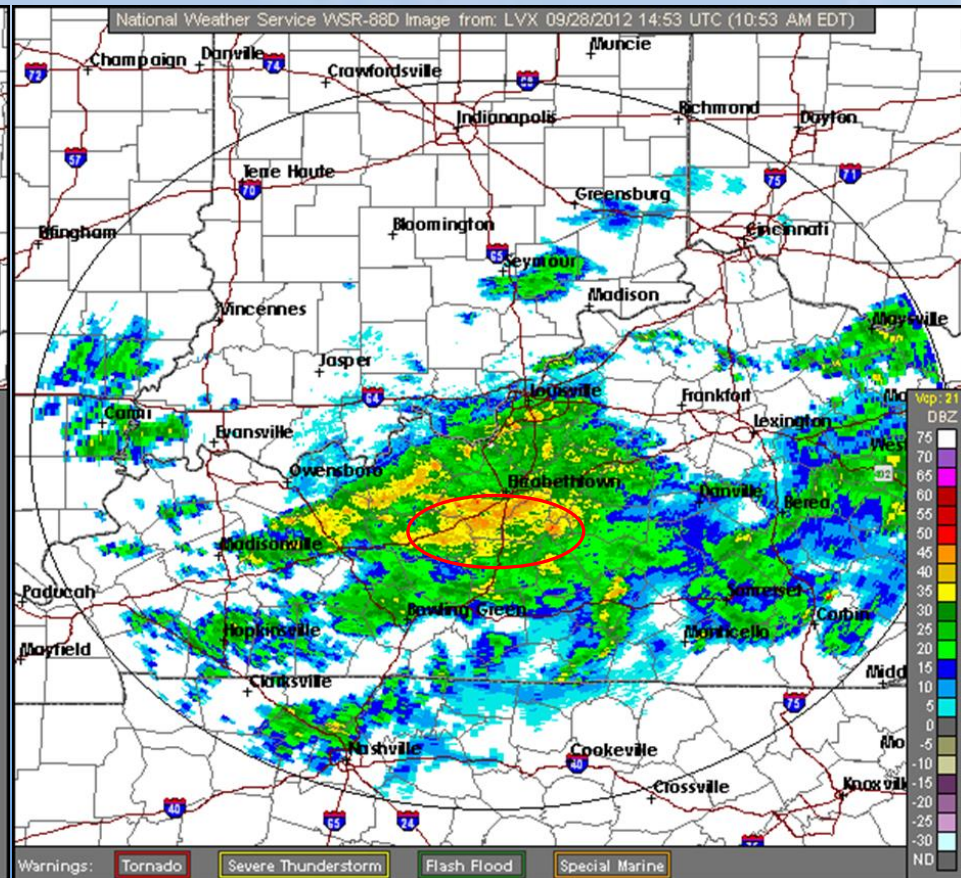
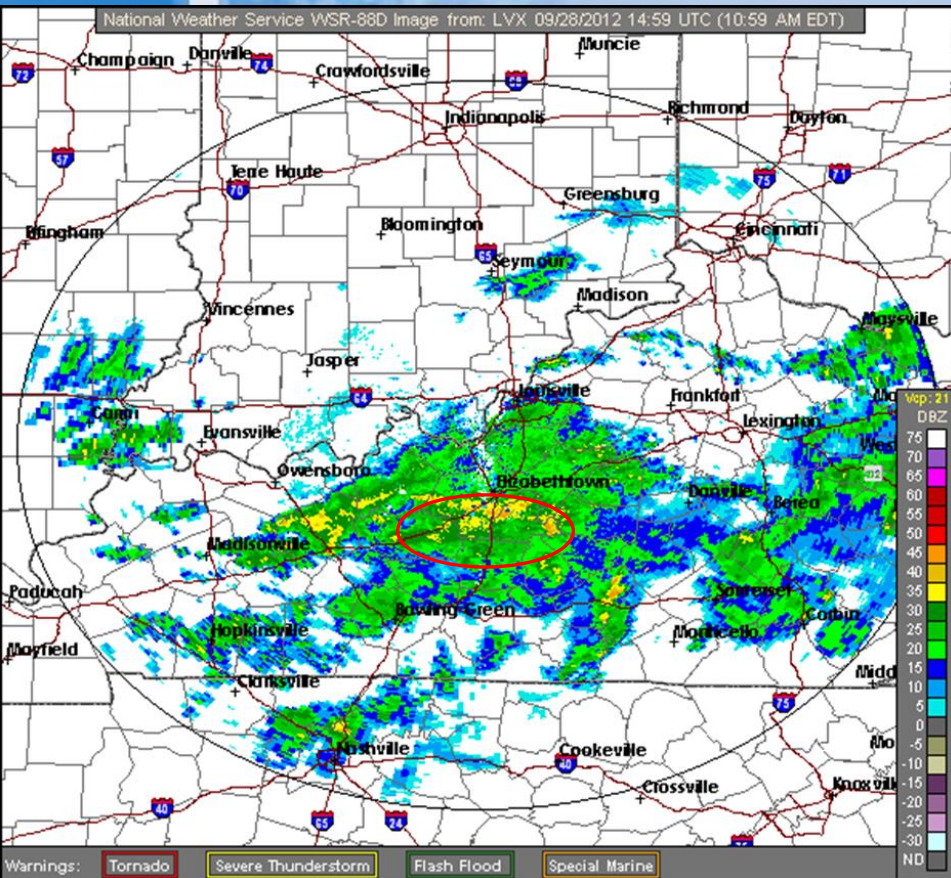
National  
Radar  
Mosaic  
Sectors

(click image)



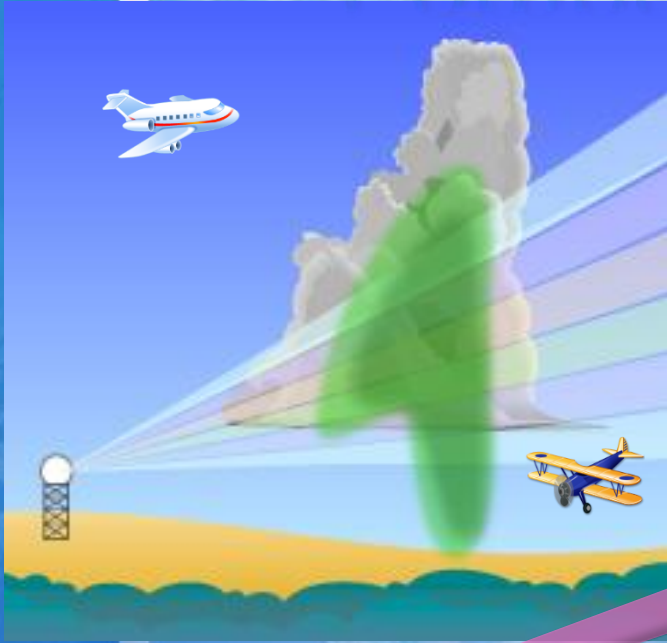


# Base vs. Composite Reflectivity

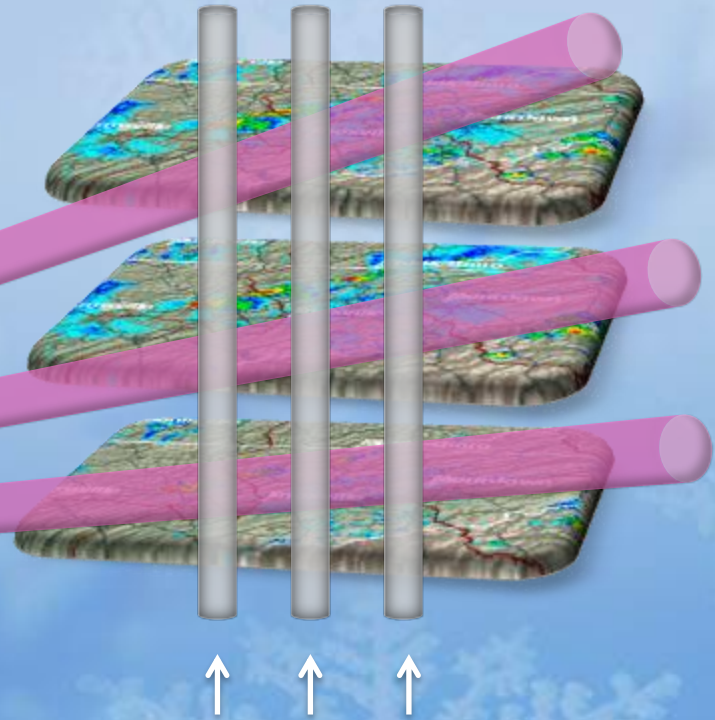




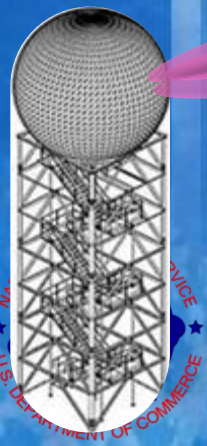
# Composite Reflectivity



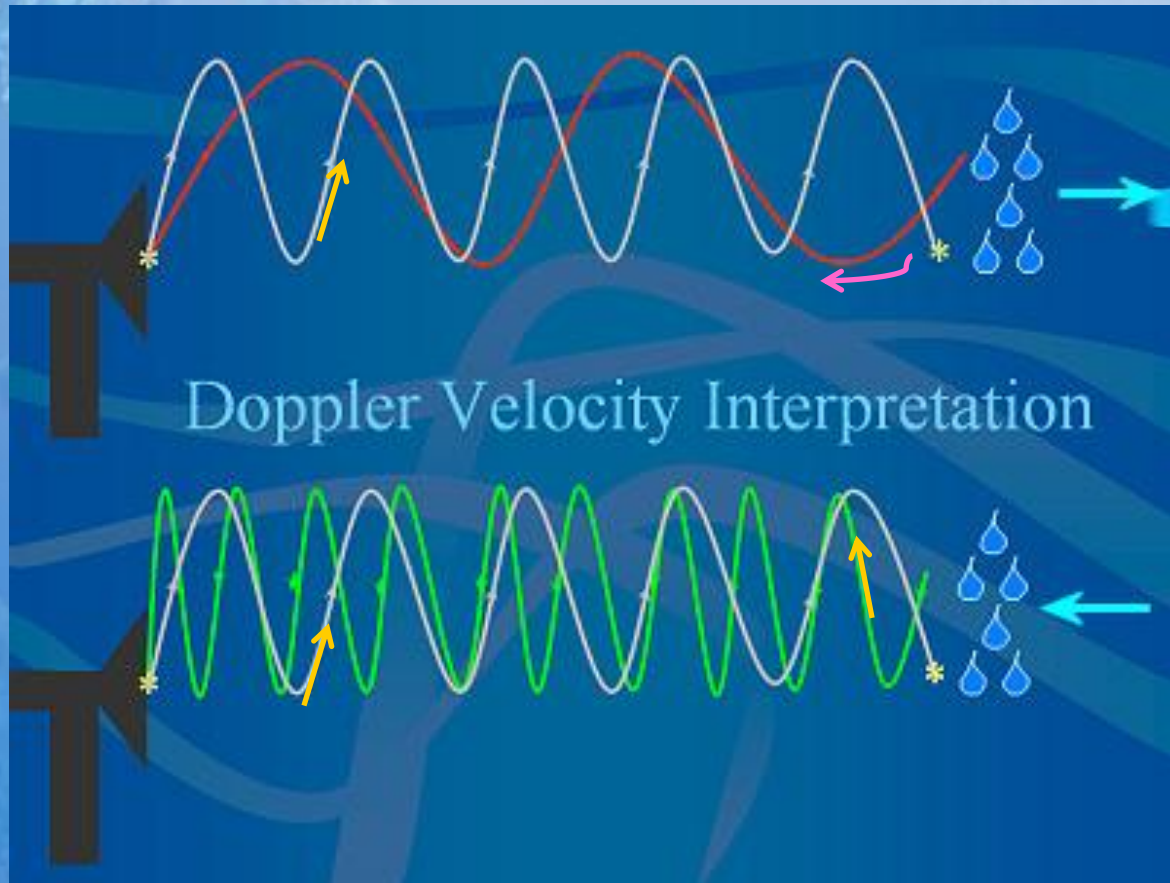
Some precipitation may not be reaching ground



Shows highest reflectivity in a column



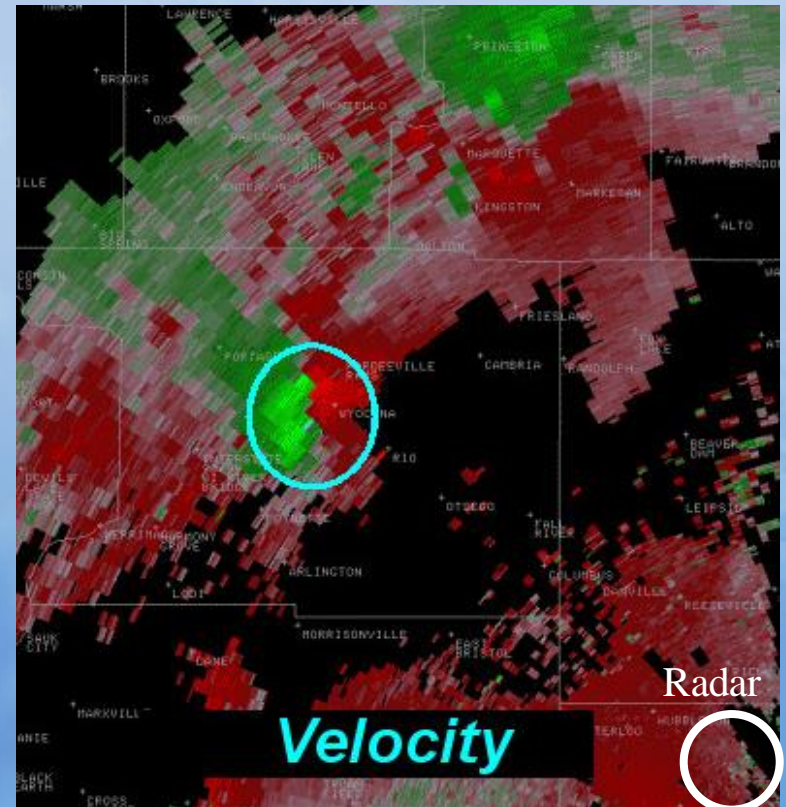
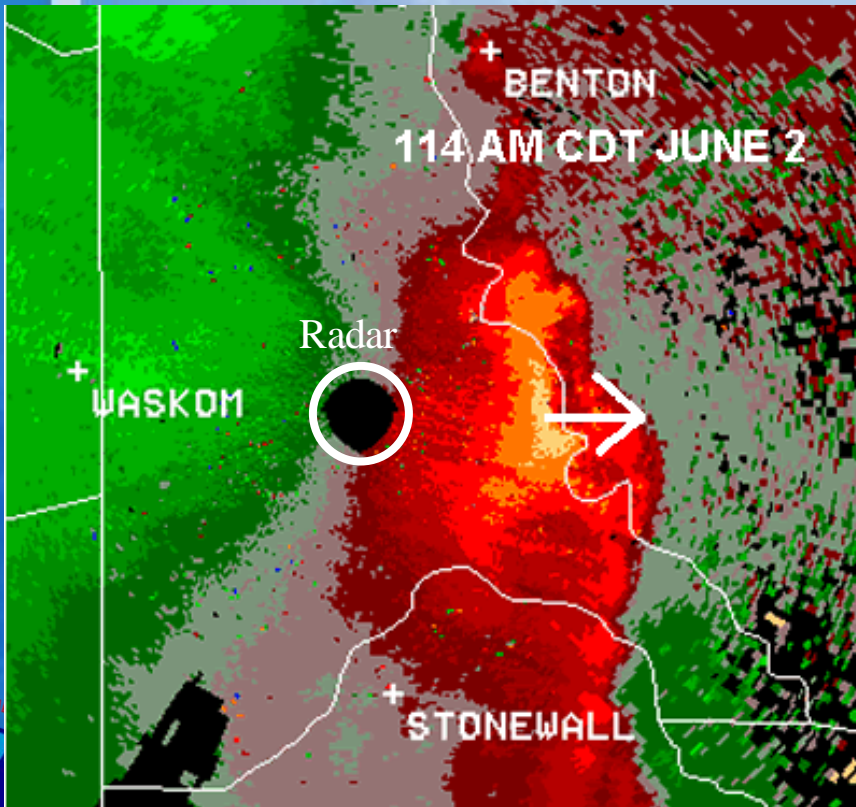
# Radar Velocity





# Radar Velocity Interpretation

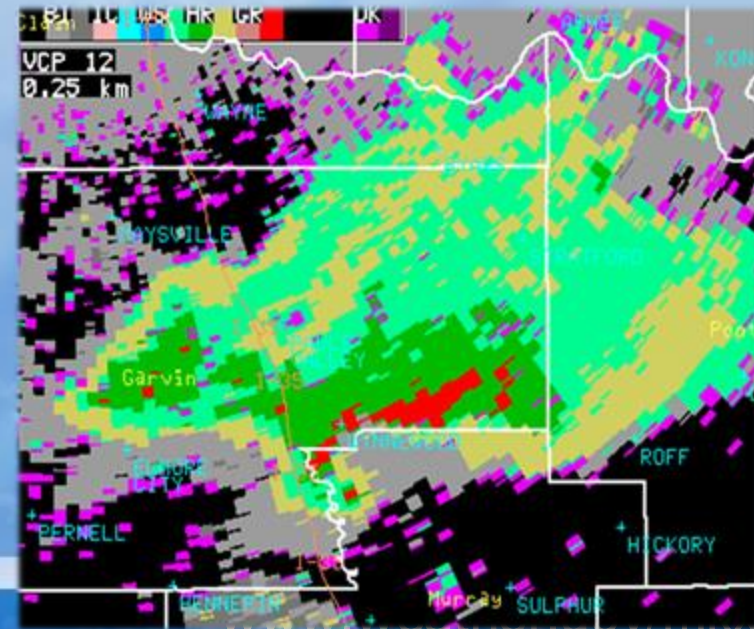
- Green: Toward the radar
- Red: Away from the radar



# Dual-Polarization Radar

## “Dual-Pol”

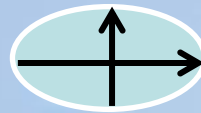
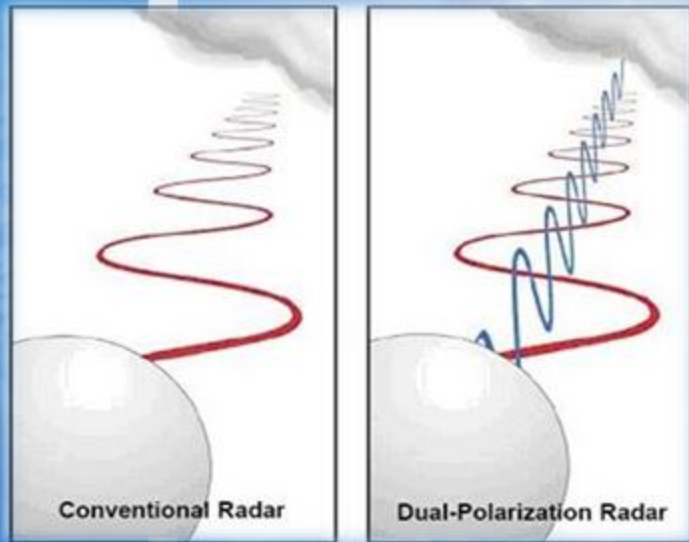
- Improvements to Conventional Doppler Radar Products
  - Precipitation classification
  - Feature identification
  - Better estimate of rainfall amounts



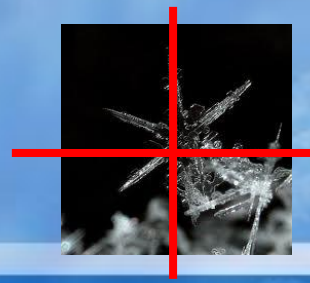
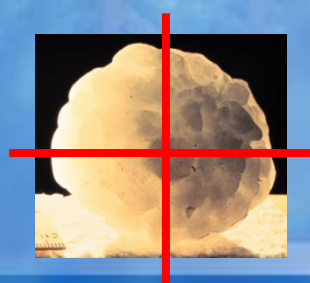
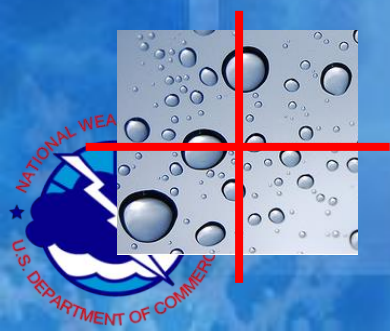
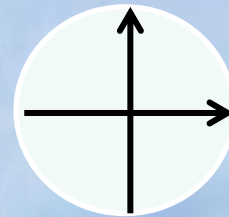


# Dual-Pol Radar

- Transmits pulses in two orientations

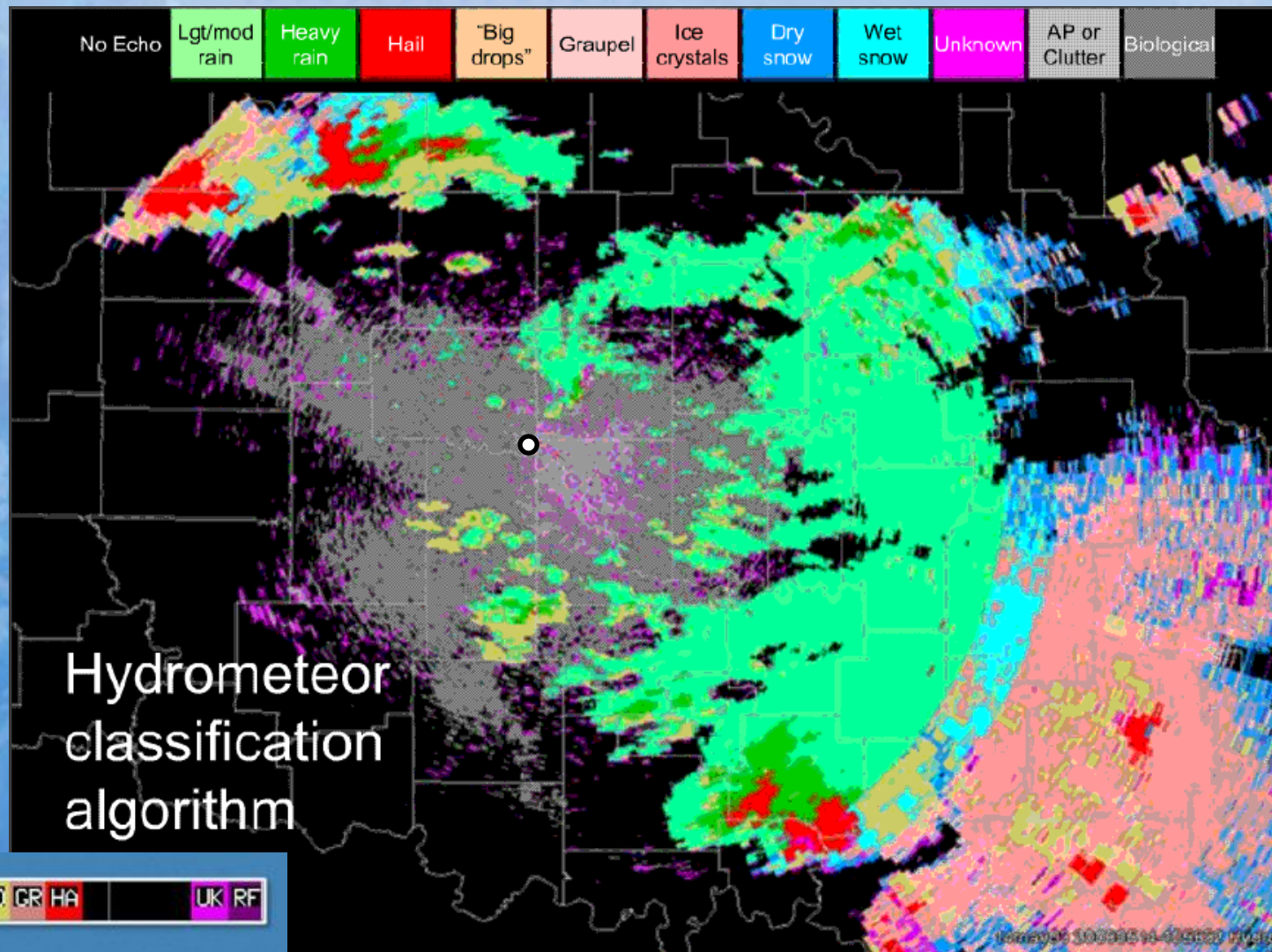


*Versus*



# Hydrometeor Classification Algorithm

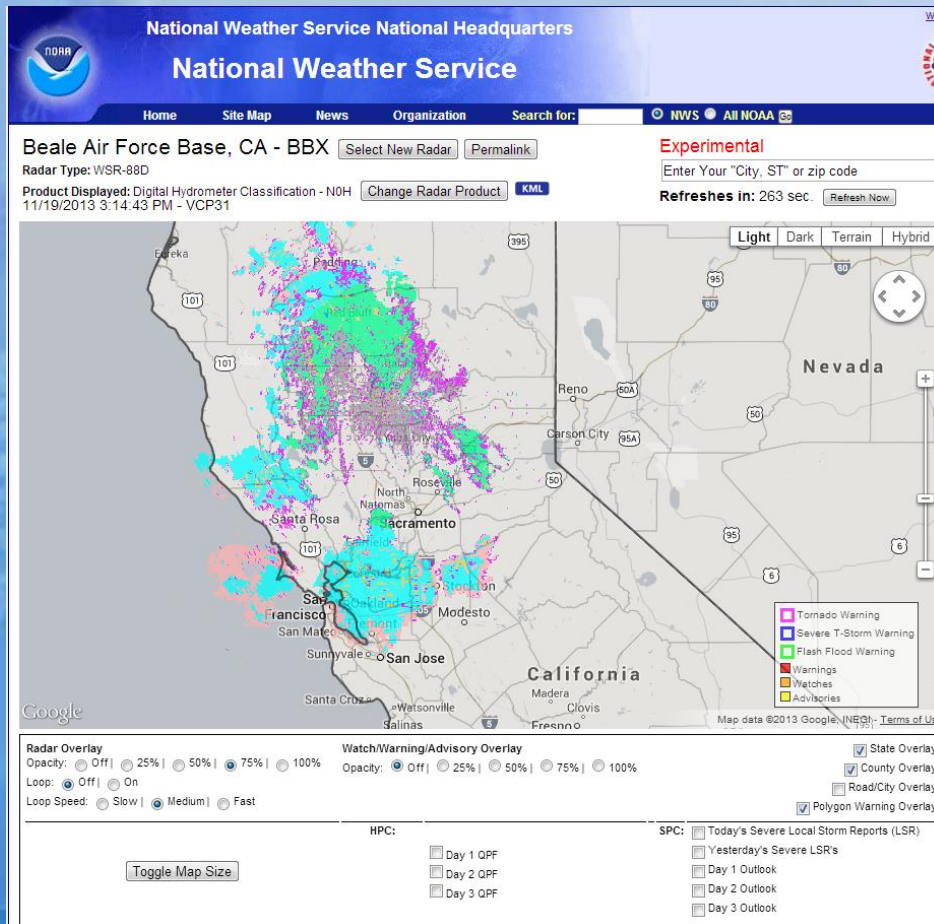
- BI - Biological
- GC - Ground clutter
- IC - Ice crystals
- DS - Dry snow
- WS - Wet snow
- RA - Rain
- HR - Heavy rain
- BD - Big drops
- GR - Graupel
- HA - Hail-rain
- UK - Unknown
- RF - Range folded





# HCA Online

• <http://www.srh.noaa.gov/ridge2/>



# Forecast “Radar”

- HRRR Model (hourly out to 15 hours)
- Now available on our Winter Weather Page! (at the bottom)
- <http://rapidrefresh.noaa.gov/HRRR>
  - Domain: NC
  - 1 km agl reflectivity
  - 1h snowfall
  - Precip type
  - Skin temp
  - 2m temp





**NATIONAL WEATHER SERVICE**  
NATIONAL SCIENTIFIC AND ATMOSPHERIC ADMINISTRATION

HOME FORECAST PAST WEATHER WEATHER SAFETY INFORMATION CENTER NEWS SEARCH ABOUT

Local forecast by "City, ST" or ZIP code  
   
[Location Help](#)

**2013 National Tsunami Preparedness Week**  
 It is National Tsunami Preparedness Week (March 24-30, 2013). If you live near or visit a coastal area, would you know what to do if a tsunami hit? Learn how to become TsunamiReady: [Read More](#)

**Customize Your Weather.gov**  
 City, ST  
 Enter Your City, ST or ZIP Code  
  
  
[Privacy Policy](#)

**Winter Hazards Simplification**  
  
 Confused by winter weather watches, warnings & advisories?  
 Click here to help NWS simplify our products.

ACTIVE ALERTS FORECAST MAPS RADAR RIVERS, LAKE'S, RAINFALL AIR QUALITY SATELLITE PAST WEATHER

Created: 03/25/13 at 14:58 UTC



Click on the map above for detailed alerts or [Warnings By State](#)  [Public Alerts in XML, CAP v1.1 and ATOM Formats](#)

<ul style="list-style-type: none"> <li>Winter Storm Watch</li> <li>Winter Storm Warning</li> <li>Winter Storm Advisory</li> <li>Winter Weather Watch</li> <li>Winter Weather Warning</li> <li>Winter Weather Advisory</li> <li>Freeze Warning</li> <li>Freeze Advisory</li> </ul>	<ul style="list-style-type: none"> <li>Heavy Snow Watch</li> <li>Heavy Snow Warning</li> <li>Heavy Snow Advisory</li> <li>Hard Frost Advisory</li> <li>Frost Advisory</li> <li>Light Frost Advisory</li> <li>Light Snow Advisory</li> <li>Light Snow Warning</li> <li>Light Snow Watch</li> </ul>	<ul style="list-style-type: none"> <li>Heavy Freeze/Thaw Watch</li> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> </ul>	<ul style="list-style-type: none"> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> <li>Small Craft Advisory</li> <li>Small Craft Warning</li> <li>Small Craft Advisory</li> </ul>
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# Website Services





Local forecast by  
"City, St" or ZIP code

[Location Help](#)

## 2013 National Tsunami Preparedness Week

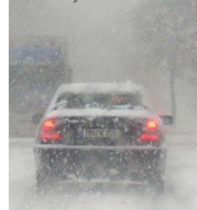
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### Customize Your Weather.gov

Enter Your City, ST or  
ZIP Code

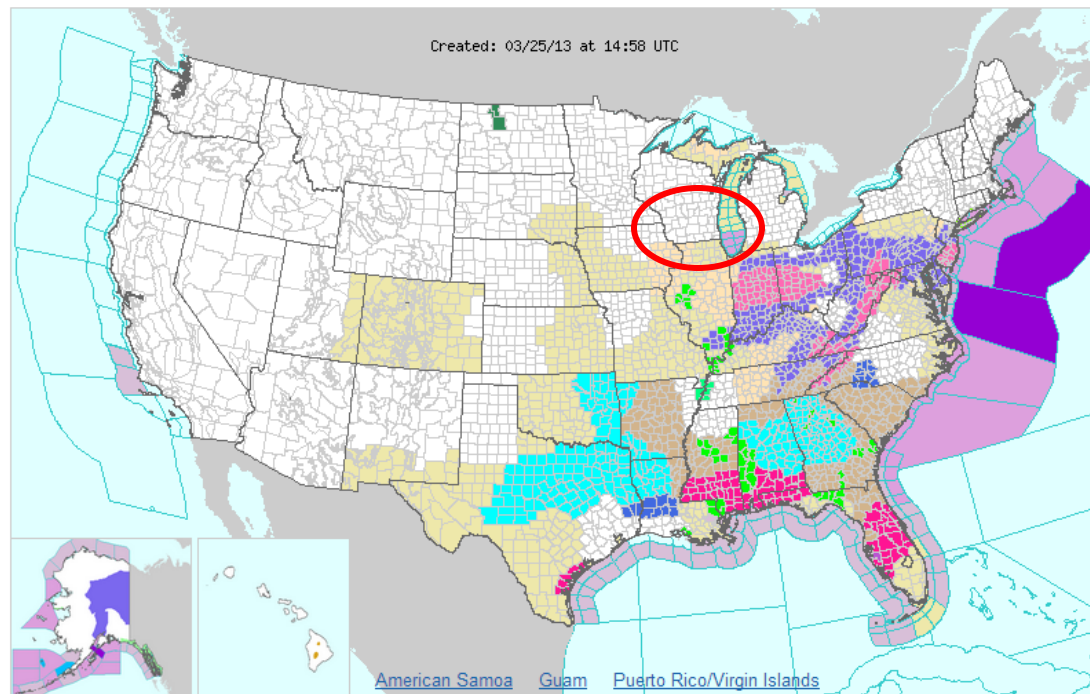
☐ Remember Me[Privacy Policy](#)

### Winter Hazards Simplification



Confused by winter  
weather **watches**,  
**warnings** & **advisories**?

Click here to help NWS  
simplify our products.

[ACTIVE ALERTS](#)[FORECAST MAPS](#)[RADAR](#)[RIVERS, LAKES, RAINFALL](#)[AIR QUALITY](#)[SATELLITE](#)[PAST WEATHER](#)

Click on the map above for detailed alerts or

Warnings By State

[Public Alerts in XML/CAP v1.1 and ATOM Formats](#)

- Winter Storm Warning
- High Wind Warning
- Storm Warning
- Flood Warning
- Gale Warning
- Freeze Warning

- Red Flag Warning
- Winter Weather Advisory
- Wind Chill Advisory
- Flood Advisory
- Coastal Flood Advisory
- High Surf Advisory

- Heavy Freezing Spray Warning
- Small Craft Advisory
- Brisk Wind Advisory
- Lake Wind Advisory
- Wind Advisory
- Low Water Advisory

- Beach Hazards Statement
- Flood Watch
- Freeze Watch
- Fire Weather Watch
- Special Weather Statement

# Weather.gov







# Milwaukee/Sullivan, WI

Home Site Map News Organization Search for:  NWS All NOAA Go



Local forecast by  
"City, St" or Zip Code

City, St  Go

**XML** RSS Feeds

Current Hazards  
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Satellite  
Snow Cover  
Snowfall Analysis  
Precip Analysis

Forecasts  
Forecast Discussion  
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Fire Weather  
Marine Weather  
Severe Weather  
Winter Weather  
Hurricane Center

Hydrology  
Rivers & Lakes

Climate  
Local  
National  
Drought  
More...  
Local Drought Info

Weather Safety  
Preparedness  
Weather Radio  
StormReady  
SkyWarn

## Top News of the Day

- Sheboygan Weather Radio Transmitter Is Down
- March 2012 vs. March 2013 - A Tale of Very Different Temperature Regimes (Updated 3/24/13)
- Drought Has Ended Over Southern Wisconsin
- Additional News Headlines

Watches & Warnings

Observations

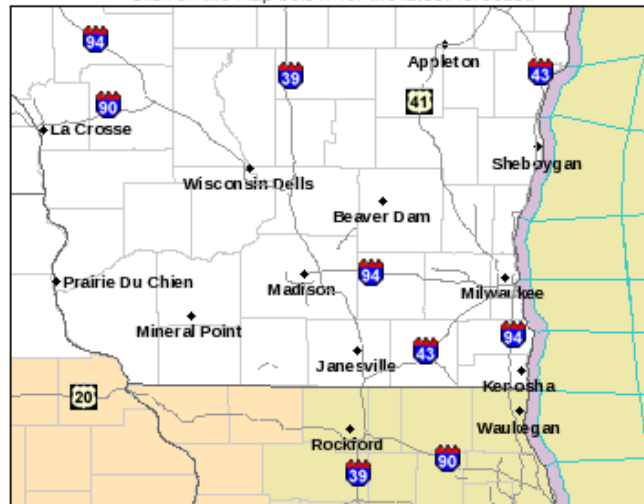
Forecast Graphics

Rivers & Lakes

Climate

Marine

Click on the map below for the latest forecast.



Read watches, warnings & advisories



Small Craft Advisory  
Special Weather Statement  
Hazardous Weather Outlook

Last map update: Mon, Mar. 25, 2013 at 10:11:33 am CDT

Latest Conditions in Milwaukee, WI

Choose Your Front Page City

Mar 25  
9:52 am

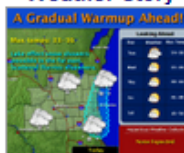


Overcast

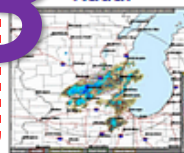
33°F  
(1°C)

Select A City:

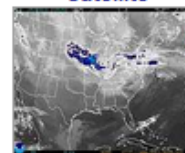
Weather Story



Radar



Satellite



Weather Map

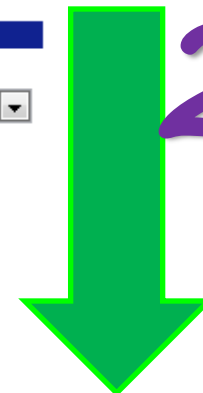


5

Five Areas of Interest

4

2



7



**Weather Activity Planner**

Welcome to the **Weather Activity Planner**. Please enter the range of weather parameters required for your activity. Then, either click the approximate location on the map below, or enter the specific latitude and longitude and hit submit. This will query the forecast grids to find when your weather requirements will be met at the nearest grid point over the next 7 days. Public **comments and suggestions** are encouraged.

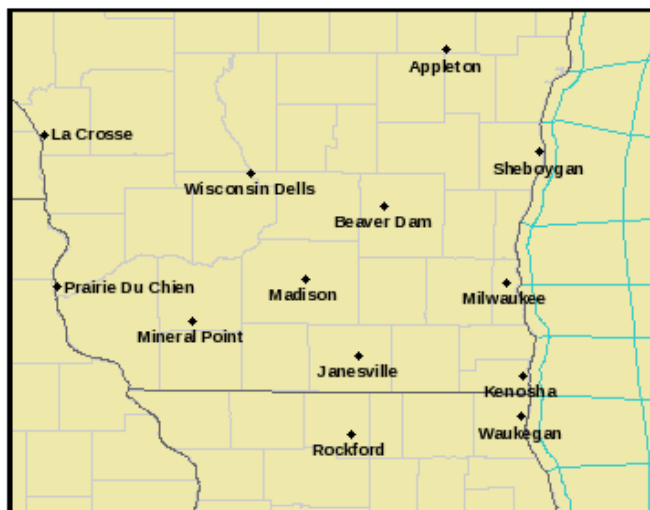
This application generates products from a digital forecast data base. It is intended to allow a user to define and produce a forecast for general planning purposes only. As any weather or hydrologic event evolves, updated forecasts and warnings are issued by the NWS. Customers are urged to obtain the latest official forecast information prior to engaging in any weather sensitive activity, and to monitor forecasts for updates during such activities.

The **Weather Activity Planner** is NOT meant to replace a spot forecast request. **Weather Activity Planner** surface winds are a gridded representation of projected, local surface winds at a 5km or 2.5km resolution. The surface winds returned do NOT account for fuel type, sheltering or slope aspect. Users can select either surface wind speeds or 20 foot winds (if the 20 foot wind grid is available). If precise wind forecasts are needed, please submit a spot forecast request to your servicing Weather Forecast Office.

[\[English Units - Click to Change\]](#)

Element	Min		Max
Temperature (°F) <input type="text"/>	70	to	90
Relative Humidity <input type="text"/>		to	
Surface Wind Speed (mph) <input type="text"/>	0	to	15

Element	Min		Max
Surface Wind Direction <input type="text"/>		to	
Sky Cover <input type="text"/>		to	
Precipitation Potential <input type="text"/>	0	to	25



[Read watches, warnings & advisories](#)

[Zoom Out](#)

[Hazardous Weather Outlook](#)

**Latitude/Longitude Entry**  
decimal degrees (i.e. 42.134) or  
deg min sec (i.e. 42 23 34)

Latitude:

Longitude:

Use "-" (negative sign) in  
longitude for locations in Western  
Hemisphere

Last Updated: Sat, Jul. 21 2012 10:02 AM

## Activity Planner

Let's say  
we want  
certain  
weather  
conditions

NOT TO  
REPLACE A  
SPOT  
FORECAST



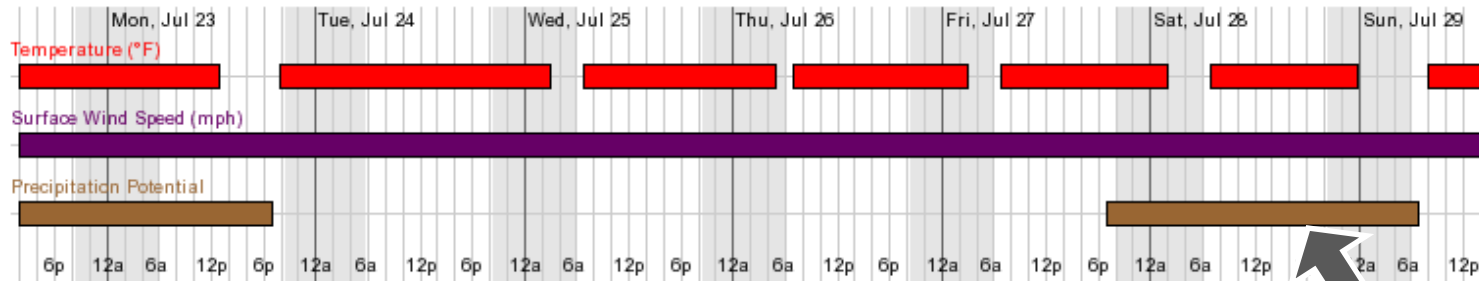
## Point Forecast: Madison WI

## Weather Activity Planner

This interactive forecast display is intended for general planning purposes. Data entered may have been changed for accuracy. Please verify the below data is appropriate. All wind direction information should be entered in a clockwise direction (using compass directions i.e. E, ESE, SE, etc). Public **comments and suggestions** are encouraged.

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## Saturday, July 28 at 6pm

Temperature: 81 °F   Surface Wind: NW 7mph

Precipitation Potential: 12%

## Hazardous weather condition(s):

Hazardous Weather Outlook

Element	Min	Max	Element	Min	Max
Temperature (°F) ▾	70	to 90	Surface Wind Speed (mph) ▾		to
Relative Humidity ▾		to	Sky Cover ▾		to
Surface Wind Speed (mph) ▾	0	to 15	Precipitation Potential ▾	0	to 25

## Activity Planner

Let's say  
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NOT TO  
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FORECAST



# Milwaukee/Sullivan, WI

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Local forecast by  
"City, St" or Zip Code

City, St  Go

**XML** RSS Feeds

Current Hazards  
Watches/Warnings  
Outlooks  
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Current Conditions  
Observations  
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Snow Cover  
Snowfall Analysis  
Precip Analysis

Forecasts  
Forecast Discussion  
Activity Planner  
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Marine Weather  
Severe Weather  
Winter Weather  
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Drought  
More...  
Local Drought Info

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Preparedness  
Weather Radio  
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SkyWarn

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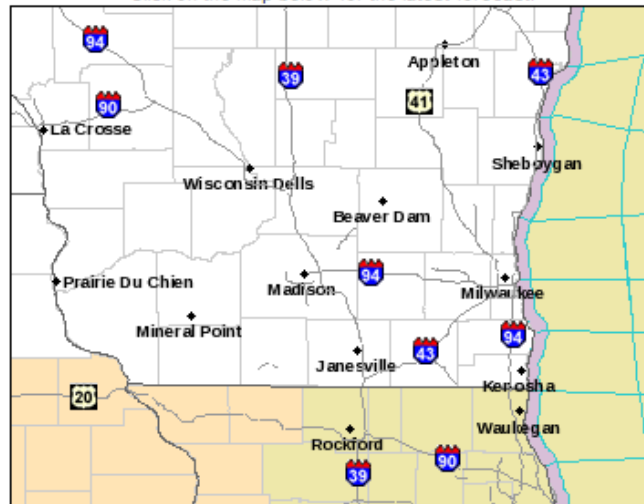
Forecast Graphics

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Read watches, warnings & advisories




Small Craft Advisory  
Special Weather Statement  
Hazardous Weather Outlook

4

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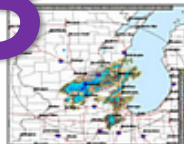
Mar 25  
9:52 am  33°F  
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Weather Story



Radar



Satellite



Weather Map



2







Local forecast by  
"City, St" or Zip Code

City, St  Go

**XML** RSS Feeds

Current Hazards  
Watches/Warnings  
Outlooks  
Submit Report

Current Conditions  
Observations  
Radar  
Satellite  
Snow Cover  
Snowfall Analysis  
Precip Analysis

Forecasts  
Forecast Discussion  
Activity Planner  
Aviation Weather  
Fire Weather  
Marine Weather  
Severe Weather  
Winter Weather  
Hurricane Center  
User Defined Area

Hydrology  
Rivers & Lakes

Climate  
Local  
National  
Drought  
NOAA Climate  
Science  
More...  
Local Drought Info

Weather Safety  
Preparedness  
Weather Radio  
StormReady  
SkyWarn

Additional Info  
Other Useful Links  
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Feedback

### Top News of the Day

- Next Generation of Our AWIPS Being Installed Today
- Wireless Emergency Alerts - Blizzard & Ice Storm Warnings Will No Longer Activate Alerts
- Show me the weather! Share your snow report using Social Media

- Watches & Warnings
- Observations
- Forecast Graphics
- Rivers & Lakes
- Climate
- Marine

Click on the map below for the latest forecast.



Read watches, warnings & advisories

Zoom Out

Small Craft Advisory

Gale Watch

Hazardous Weather Outlook

Last map update: Thu, Nov. 14, 2013 at 8:55:35 pm CST

Latest Conditions in Milwaukee, WI Choose Your Front Page City

Nov 14  
7:52 pm



Mostly Cloudy

43°F  
(6°C)

Select A City:

Weather Story

Radar

Satellite

Weather Map

# One Stop Shop!

### Web Page Tutorials:

- Climate Page
- Activity Planner
- Hourly Weather Planner

NWS Milwaukee/Sullivan  
Social Media Feeds

- Graphical Weekend Weather Forecast
- Winter Weather Page
- Summer Severe Weather Briefing Page

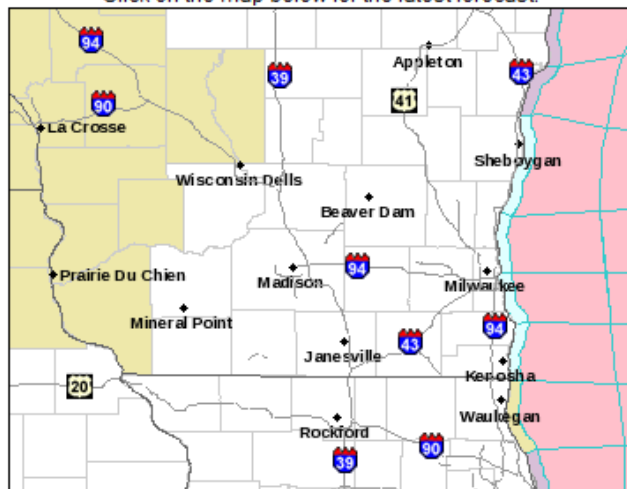
Numerical Models



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"City, St" or Zip CodeCity, St  [XML](#) [RSS Feeds](#)[Current Hazards](#)  
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## Winter Weather Summary Page

Click on the map below for the latest forecast.



Last map update: Thu, Nov. 14, 2013 at 8:58:34 pm CST

[Read watches,  
warnings &  
advisories](#)[Small Craft Advisory](#)  
[Gale Watch](#)  
[Hazardous Weather  
Outlook](#)

### Latest Forecasts

- [Watches/Warnings/Advisories](#)
- [Warning/Advisory Thresholds](#)
- [Short Term Forecast](#)
- [Special Weather Statement](#)

### Observed Weather

- [Mesonet Surface Obs](#)
- [Local Station Plot](#)
- [Hourly Weather Roundup](#)
- [National Plot](#)

### Discussions

- [Area Forecast Discussion](#)
- [Hazardous Weather Outlook](#)
- [Heavy Snow Discussion](#)

### Road Conditions

- [Wisconsin](#)
- [Illinois](#)
- [Minnesota](#)
- [Iowa](#)

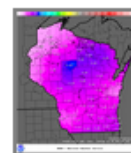
### Snowfall Information

- [Send Us Your Snow Report](#)
- [Local Storm Report \(LSR\)](#)
- [LSR Graphic](#)
- [Public Information Statement](#)
- [Daily Snowfall](#)
- [Daily Snow Depth](#)
- [Regional Snow Depth Analysis](#)
- [Regional Snowfall Analysis](#)
- [U.S. Snow Monitor](#)

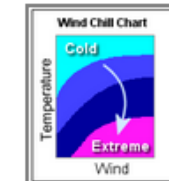
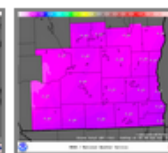
### Local - Event Specific Snowfall Forecast



Snow Forecast

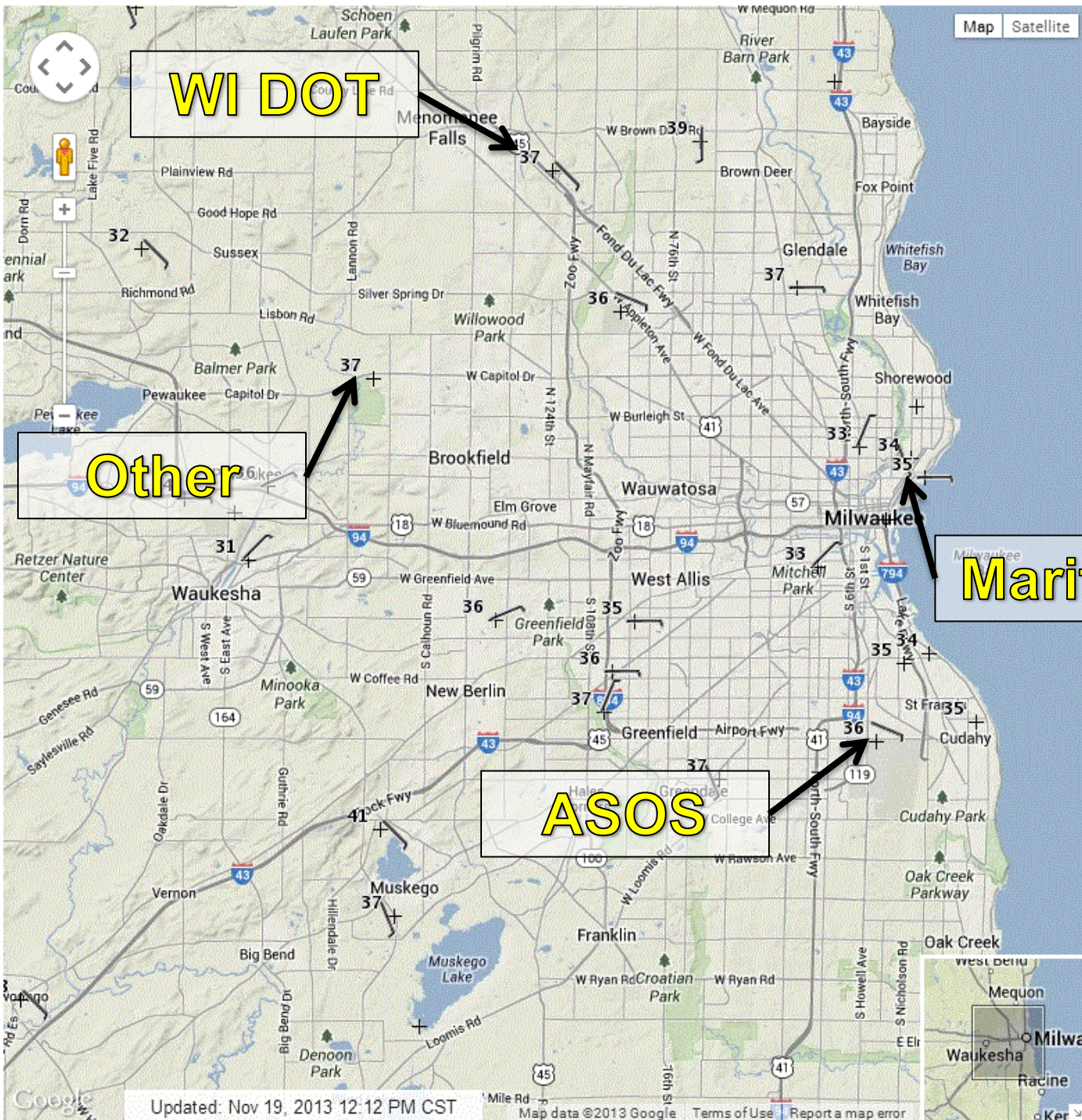


Liquid Equivalent

*Scroll  
Down*

govnknx





[XML](#) [KML](#) [Permalink](#)

**Data Filters**

Gusts: 0 mph 150 mph

Temps: -80 °F 130 °F

Elev: -300 ft 13 000 ft

RH: 0 % 100 %

**Data Display**

☒ Weather

☐ Precip

☐ 24 hr Max/Min

☐ No Data

☒ Temp ☐ Celsius

☒ Wind

☐ RH

☐ Dew Point

☐ SLP

☐ Wind Chill

**Overlays**

Radar: ☐

Radar Loop Controls:

Satellite: ☐

GOES Visible:


Current Fires: ☐

Perimeters: ☐



Snowfall Information	Local - <b>Event Specific</b> Snowfall Forecast	Wind Chill Chart
<ul style="list-style-type: none"> <li><a href="#">Send Us Your Snow Report</a></li> <li><a href="#">Local Storm Report (LSR)</a></li> <li><a href="#">LSR Graphic</a></li> <li><a href="#">Public Information Statement</a></li> <li><a href="#">Daily Snowfall</a></li> <li><a href="#">Daily Snow Depth</a></li> <li><a href="#">Regional Snow Depth Analysis</a></li> <li><a href="#">Regional Snowfall Analysis</a></li> <li><a href="#">U.S. Snow Monitor</a></li> </ul>	 <div style="display: flex; justify-content: space-around;"> <div>Snow Forecast</div> <div>Liquid Equivalent</div> </div>	


### Current Conditions



Radar/Surface Analysis




Weather Story




Local Radar




Regional Radar



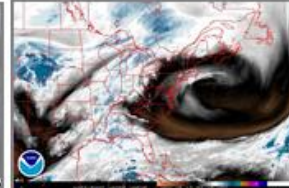
National Watch/Warning Map



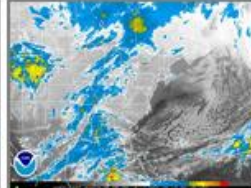
Visible (Click:Loop)



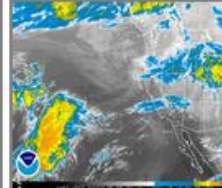
Local Visible (Click:Loop)



Water Vapor




Eastern GOES




Western GOES


### Graphical Forecast Information From HPC




12hr Fcst




24hr Fcst




36hr Fcst




48hr Fcst




Day 3 Fcst




Day 4 Fcst



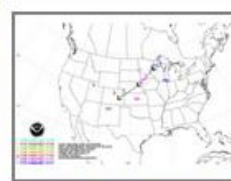
Day 5 Fcst



Day 6 Fcst



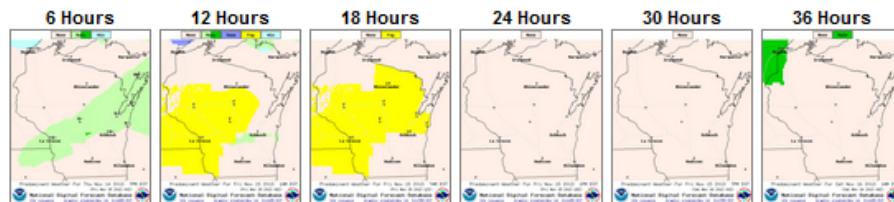
Day 7 Fcst



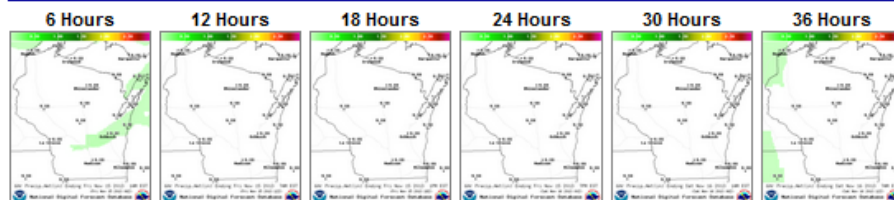
Ensemble Low Tracks



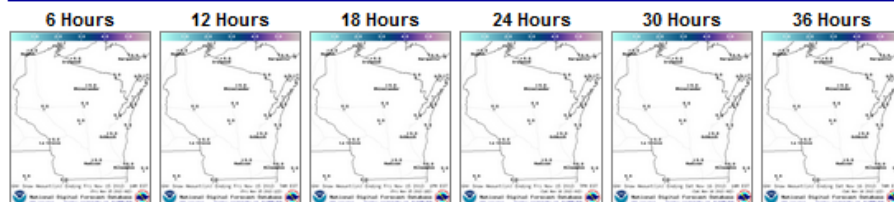
6 hour weather type forecasts at:



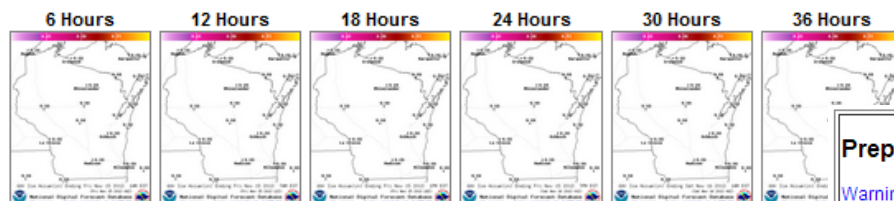
6 Hour Precipitation Amount Forecasts at:



6 Hour Deterministic Snowfall Forecasts at:

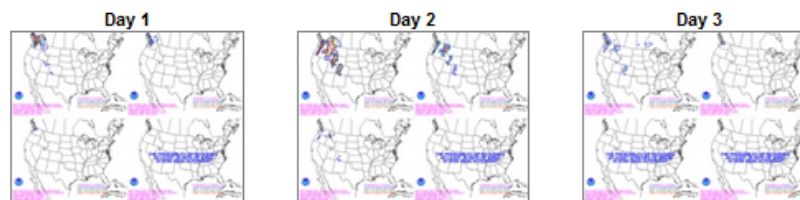


6 Hour Ice Accumulation Forecasts at:



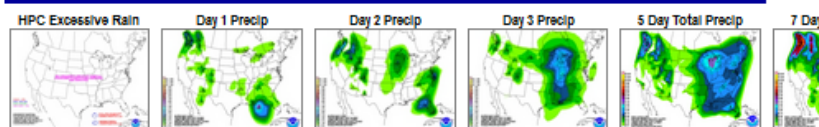
### Winter Weather Composite Charts From HPC

The following charts depict in a 4-panel format the probabilities of snow reaching or exceeding 4, 8, and 12 inches and the probability of freezing rain reaching or exceeding .25 inch. Click on a thumbnail to enlarge.



### HPC Precipitation Outlook

Links: [6 Hour QPF Loop](#) | [6 Hour Probabilistic QPF](#)



# Winter Weather Page Part 3

## Preparedness:

[Warnings/Advisory Terminology](#)  
[Winter Weather Safety and Awareness Site](#)  
[Protect Yourself Before The Storm Hits!](#)  
[Prepare For Wisconsin Winter Weather](#)  
[What To Do If Caught In a Winter Storm!](#)  
[Stay Safe In Wisconsin Winter Weather](#)  
[Stay Informed During a Storm!](#)  
[What Makes a Winter Storm?](#)  
[Winter Precipitation Types](#)  
[Winter Weather Flyer](#) created by NWS Green Bay

## Short Range Computer Simulations:

[High Resolution Rapid Refresh \(HRRR\)](#)

## Winter Storm Statistics:

Winter Season 1982-1983 to 2011-2012:

[Total Number of Winter Storms](#)  
[Total Number of Ice Storms](#)  
[Total Number of Blizzards](#)  
[Total Of All Winter Events](#)  
[Yearly Average Of All Winter Events](#)

[Average Season Snowfall](#)

## Seasonal Wisconsin Snowfall Totals:

2012-2013

[Biggest Snowstorms across the United States](#)  
[Biggest Snowstorms across Wisconsin](#)  
[Memorable Snowstorms in Milwaukee](#)  
[The Southern Wisconsin Blizzard Of 1881](#)



# Milwaukee/Sullivan, WI

Home Site Map News Organization Search for:  NWS All NOAA Go



Local forecast by  
"City, St" or Zip Code

City, St  Go

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Marine Weather  
Severe Weather  
Winter Weather  
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**Climate**  
Local  
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Drought  
More...  
Local Drought Info

**Weather Safety**  
Preparedness  
Weather Radio  
StormReady  
SkyWarn

## Top News of the Day

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- Drought Has Ended Over Southern Wisconsin
- Additional News Headlines

Watches & Warnings

Observations

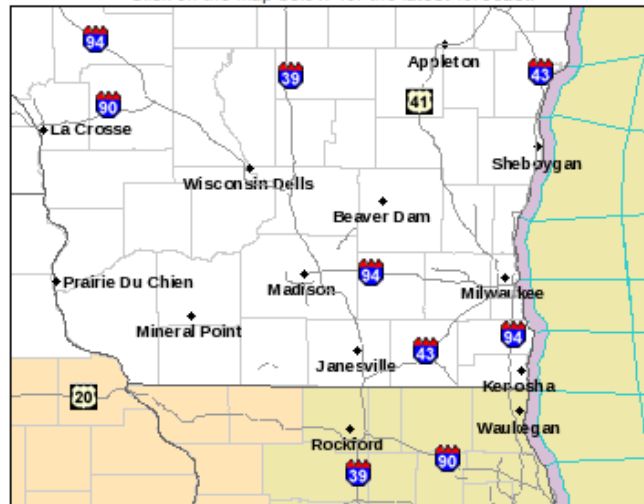
Forecast Graphics

Rivers & Lakes

Climate

Marine

Click on the map below for the latest forecast.



Read watches, warnings & advisories



Small Craft Advisory  
Special Weather Statement  
Hazardous Weather Outlook

Last map update: Mon, Mar. 25, 2013 at 10:11:33 am CDT

Latest Conditions in Milwaukee, WI

Choose Your Front Page City

Mar 25  
9:52 am



Overcast

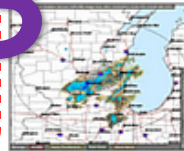
33°F  
(1°C)

Select A City:

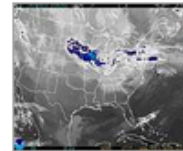
Weather Story



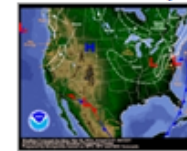
Radar



Satellite



Weather Map

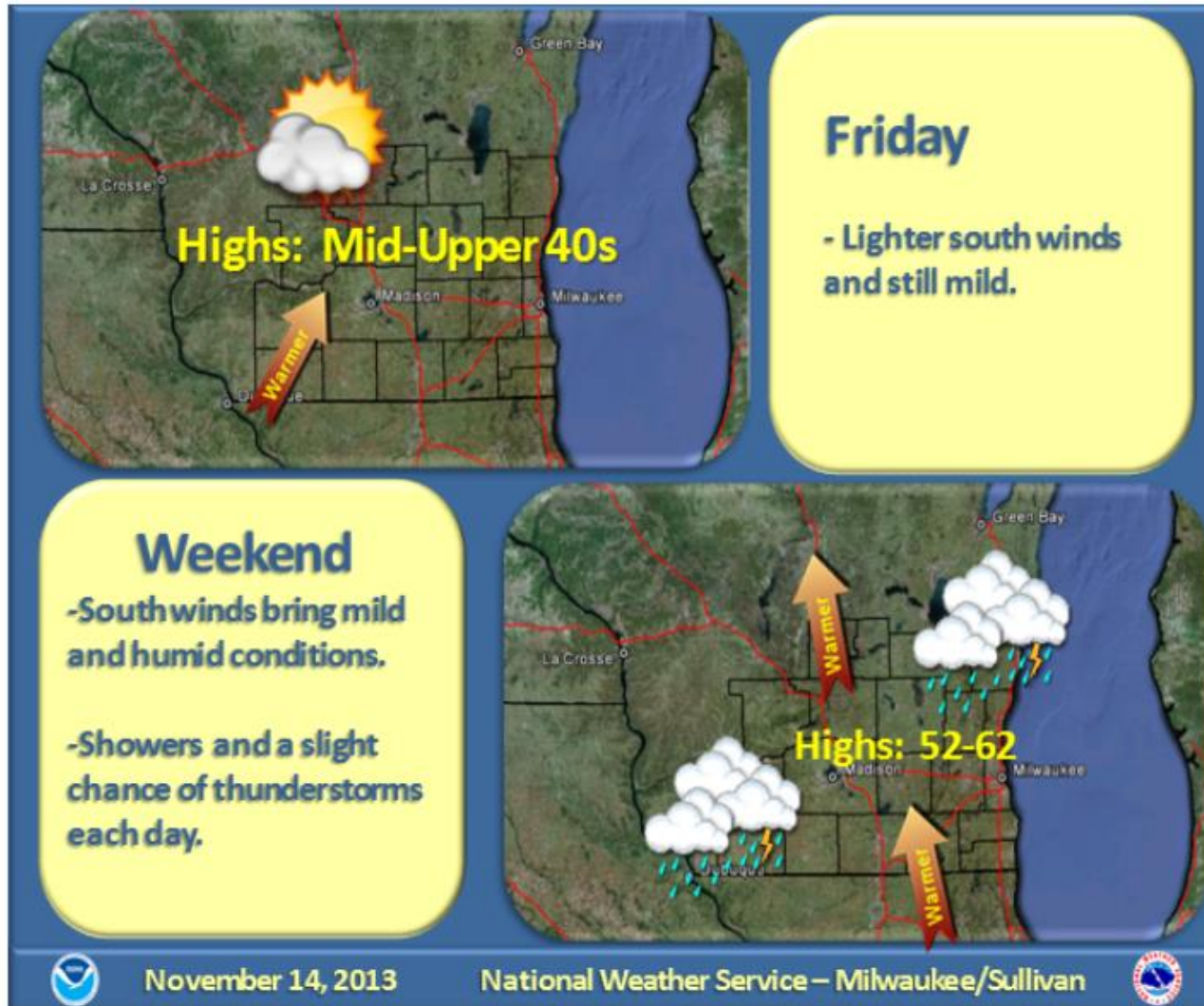




# Weather Story

[NWS Milwaukee/Sullivan, WI](#)

Weather Stories from  
Neighboring Offices



Mild air has finally returned to southern Wisconsin and it will continue into the weekend. Lighter winds are expected tonight and Friday but south winds will increase again for the weekend. Showers and isolated thunderstorms are expected for much of the weekend.





# Milwaukee/Sullivan, WI

Home Site Map News Organization Search for:  NWS All NOAA Go



Local forecast by  
"City, St" or Zip Code

City, St  Go

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Watches/Warnings  
Outlooks  
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Current Conditions  
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Satellite  
Snow Cover  
Snowfall Analysis  
Precip Analysis

Forecasts  
Forecast Discussion  
Activity Planner  
Aviation Weather  
Fire Weather  
Marine Weather  
Severe Weather  
Winter Weather  
Hurricane Center

Hydrology  
Rivers & Lakes

Climate  
Local  
National  
Drought  
More...  
Local Drought Info

Weather Safety  
Preparedness  
Weather Radio  
StormReady  
SkyWarn

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Watches & Warnings

Observations

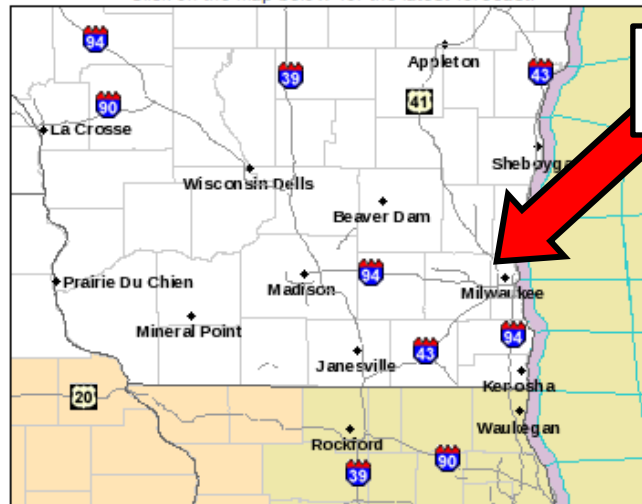
Forecast Graphics

Rivers & Lakes

Climate

Marine

Click on the map below for the latest forecast.



Last map update: Mon, Mar. 25, 2013 at 10:11:33 am CDT

Point and Click

- Small Craft Advisory
- Special Weather Statement
- Hazardous Weather Outlook

Latest Conditions in Milwaukee, WI

Choose Your Front Page City

Mar 25  
9:52 am



Overcast

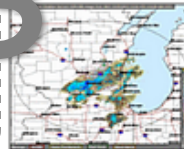
33°F  
(1°C)

Select A City:

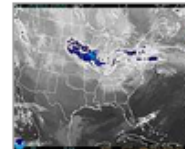
Weather Story



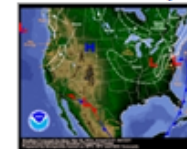
Radar



Satellite



Weather Map





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"City, St" or ZIP code

[Location Help](#)

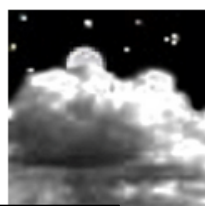
Obs

## Winter Storm to Affect Cascades and Northern Rockies into Weekend

A cold winter storm is forecast to move into the Cascades and northern Rockies, with snow expected to begin falling across the region early Friday and lasting through the weekend. Snowfall totals in excess of a foot are forecast for the higher elevations. Winter Storm Warnings and Winter Weather Advisories are in effect for the parts of the region.

[Read More...](#)

## Current Conditions

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Mostly Cloudy

# 42°F

## 6°C

Humidity 55%  
Wind Speed SW 16 mph  
Barometer 29.92 in (1013.6 mb)  
Dewpoint 27°F (-3°C)  
Visibility 10.00 mi  
Wind Chill 34°F (1°C)

Last Update on 14 Nov 8:52 pm CST

Current conditions at

**Milwaukee, General Mitchell International Airport (KMKE)**

Lat: 42.96 Lon: -87.9 Elev: 630ft

[More Local Wx](#) | [3 Day History](#) | [Mobile Weather](#)

## West Allis WI

7 Day Forecast

**Milwaukee, WI**

NWS Weather Forecast Office

The Forecast

TONIGHT	FRIDAY	FRIDAY NIGHT	SATURDAY	SATURDAY NIGHT	SUNDAY	SUNDAY NIGHT	MONDAY	MONDAY NIGHT
Mostly Cloudy Low: 35 °F	Mostly Sunny High: 49 °F	Partly Cloudy Low: 38 °F	Rain High: 53 °F	Rain Low: 51 °F	Rain Likely High: 59 °F	Chance Rain Low: 34 °F	Slight Chc Rain High: 39 °F	Partly Cloudy Low: 25 °F

**Tonight** Mostly cloudy, with a low around 35. Southwest wind around 10 mph.

**Friday** Mostly sunny, with a high near 49. Southwest wind around 10 mph.

**Friday Night** Partly cloudy, with a low around 38. South wind around 10 mph.

**Saturday** A chance of rain, then rain and possibly a thunderstorm after noon. High near 53. Breezy, with a south wind 10 to 20 mph, with gusts as high as 30 mph. Chance of precipitation is 80%. New

Click Map for Forecast

[Disclaimer](#)



Scroll  
Down to...

- Check your forecast location
- See radar and satellite
- Or....

Let's click the  
Hourly  
Weather  
Graph...



Friday	Mostly sunny, with a high near 49. Southwest wind around 10 mph.
Friday Night	Partly cloudy, with a low around 38. South wind around 10 mph.
Saturday	A chance of rain, then rain and possibly a thunderstorm after noon. High near 53. Breezy, with a south wind 10 to 20 mph, with gusts as high as 30 mph. Chance of precipitation is 80%. New rainfall amounts between a tenth and quarter of an inch, except higher amounts possible in thunderstorms.
Saturday Night	Rain. Low around 51. Breezy, with a south wind 15 to 20 mph, with gusts as high as 30 mph. Chance of precipitation is 80%. New precipitation amounts between a quarter and half of an inch possible.
Sunday	Rain likely and possibly a thunderstorm. Cloudy, with a high near 59. Breezy, with a south wind 15 to 20 mph becoming west in the afternoon. Chance of precipitation is 70%. New rainfall amounts between a half and three quarters of an inch possible.
Sunday Night	A 50 percent chance of rain. Mostly cloudy, with a low around 34. Breezy, with a west wind 15 to 20 mph, with gusts as high as 30 mph.
Monday	A 20 percent chance of rain. Partly sunny, with a high near 39. Breezy, with a west wind 15 to 20 mph, with gusts as high as 30 mph.
Monday Night	Partly cloudy, with a low around 25.
Tuesday	Mostly sunny, with a high near 35.
Tuesday Night	Partly cloudy, with a low around 26.
Wednesday	Mostly sunny, with a high near 41.
Wednesday Night	Partly cloudy, with a low around 31.
Thursday	Mostly sunny, with a high near 44.

## Additional Forecasts and Information

[ZONE AREA FORECAST FOR MILWAUKEE COUNTY, WI](#)

[Forecast Discussion](#)  
[Printable Forecast](#)  
[Text Only Forecast](#)

[Hourly Weather Graph](#)  
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[Climate Graphs For Milwaukee & Madison](#)

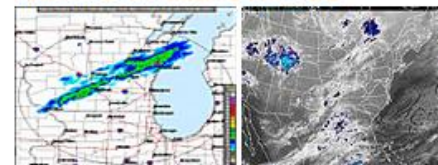


### FORECAST DETAILS

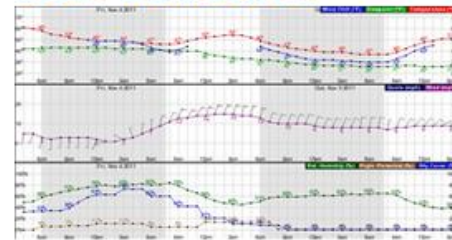
Point Forecast: West Allis WI  
43°N 88.04°W (Elev. 797 ft)  
Last Update: 9:26 pm CST Nov 14, 2013  
Forecast Valid: 10pm CST Nov 14, 2013-6pm CST Nov 21, 2013  
[Forecast Discussion](#)

[KML](#) [XML](#)

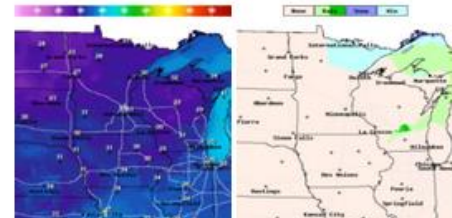
### RADAR & SATELLITE IMAGES



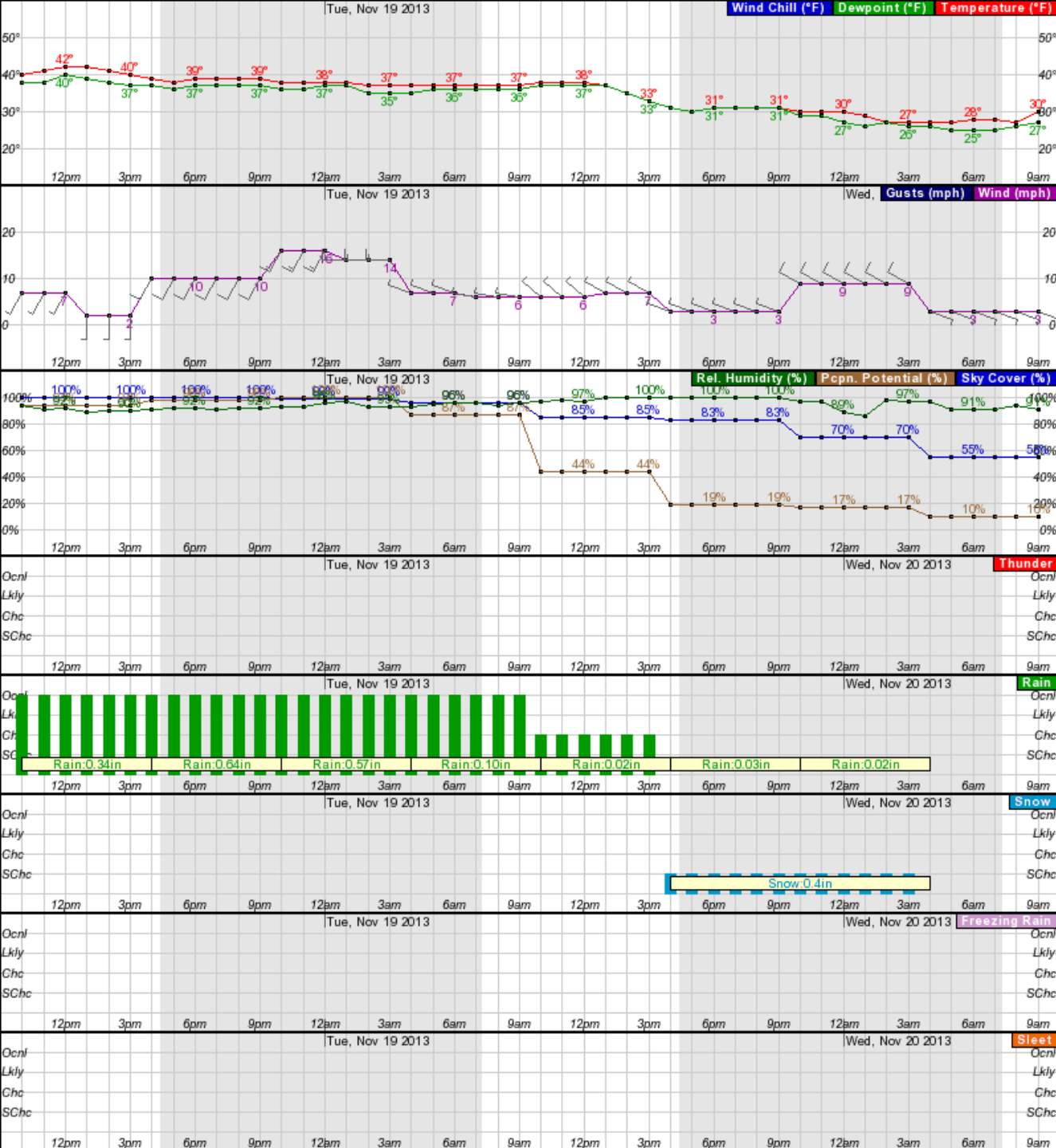
### HOURLY WEATHER GRAPH



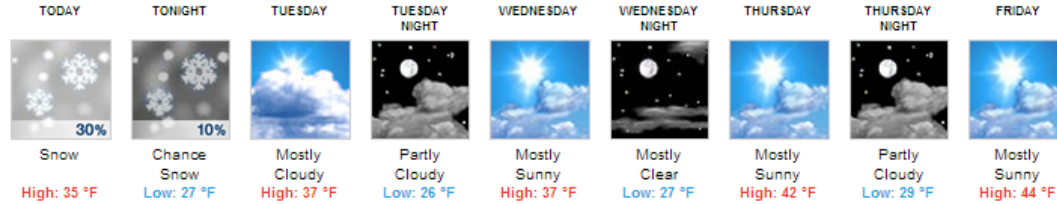
### NATIONAL DIGITAL FORECAST DATABASE







- Hourly Data!
- Variables:
  - Temp
  - Dewpoint
  - Wind
  - RH
  - Sky Cover
  - Probability of Precip. & Thunder
  - Amounts



## 7-DAY FORECAST

Today	Flurries before 1pm, then a chance of snow showers. Cloudy, with a high near 35. North wind around 15 mph, with gusts as high as 25 mph. Chance of precipitation is 30%.
Tonight	A slight chance of snow showers before 7pm, then a chance for flurries before ending. Cloudy, with a low around 27. North wind 10 to 15 mph. Chance of precipitation is 10%.
Tuesday	Mostly cloudy, with a high near 37. Northwest wind 10 to 15 mph.
Tuesday Night	Partly cloudy, with a low around 26. Northwest wind around 10 mph.
Wednesday	Mostly sunny, with a high near 37. Northwest wind around 10 mph.
Wednesday Night	Mostly clear, with a low around 27. Northwest wind 5 to 10 mph.
Thursday	Mostly sunny, with a high near 42. Northwest wind around 5 mph.
Thursday Night	Partly cloudy, with a low around 29. North wind around 5 mph becoming west after midnight.
Friday	Mostly sunny, with a high near 44.
Friday Night	Partly cloudy, with a low around 31.
Saturday	Mostly sunny, with a high near 47.
Saturday Night	A 30 percent chance of rain. Mostly cloudy, with a low around 36.
Sunday	A 40 percent chance of rain. Mostly cloudy, with a high near 49.

## NWS Milwaukee, WI

Point Forecast: Milwaukee, General Mitchell International Airport WI  
42.95°N 87.89°W (Elev. 699 ft)

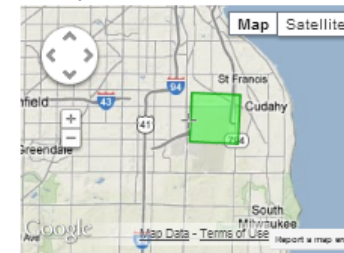
Last Update: 10:10 am CDT Mar 25, 2013  
Forecast: 11am CDT Mar 25, 2013-8pm CDT Mar 31, 2013

Valid: Forecast Discussion

[KML](#) [XML](#)

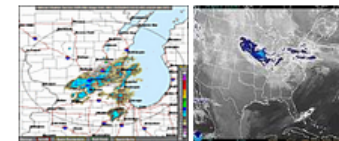
Click Map for Forecast

[Disclaimer](#)

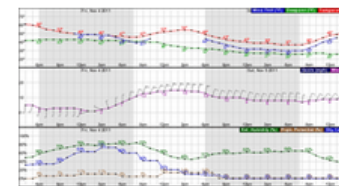


Requested Location: Milwaukee, WI  
Lat/Lon: 42.95°N 87.89°W Elevation: 699 ft

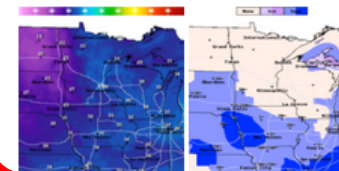
## RADAR & SATELLITE IMAGES



## HOURLY WEATHER GRAPH



## NATIONAL DIGITAL FORECAST DATABASE



## ADDITIONAL FORECASTS AND INFORMATION

[ZONE AREA FORECAST FOR MILWAUKEE COUNTY, WI](#)

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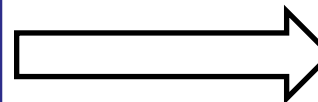
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[Hourly Weather Conditions](#)

[Past Weather Information](#)  
[Interactive Forecast Map](#)

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[About Point Forecasts](#)

[Lk. Michigan Nearshore Frost](#)  
[Climate Graphs For Milwaukee & Madison](#)

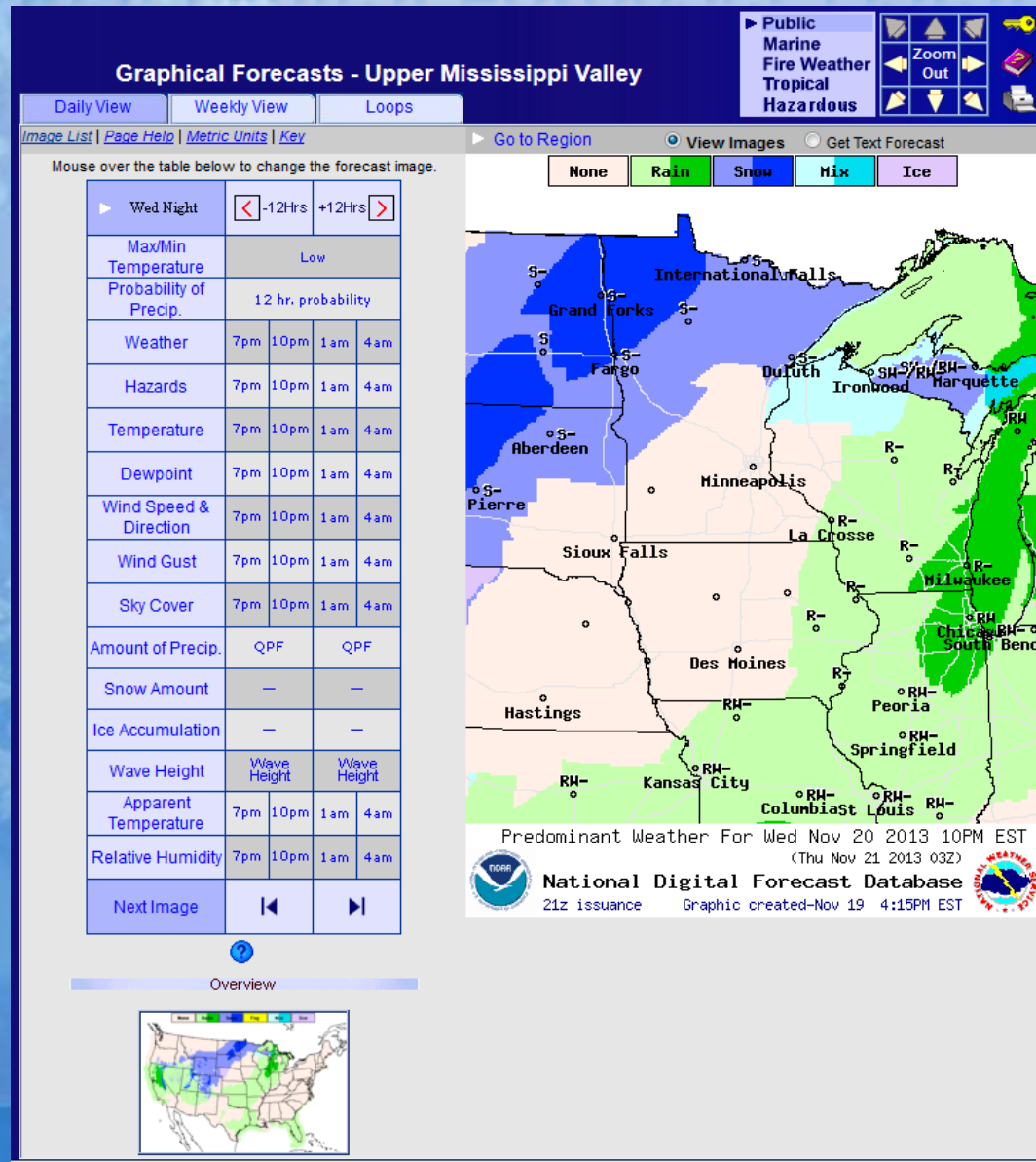
**Graphical  
Depiction**



ther.gov/mkx



# National Digital Forecast Database





# Milwaukee/Sullivan, WI



Local forecast by  
"City, St" or Zip Code

City, St  Go

**XML** RSS Feeds

**Current Hazards**  
Watches/Warnings  
Outlooks  
Submit Report

**Current Conditions**  
Observations  
Radar  
Satellite  
Snow Cover  
Snowfall Analysis  
Precip Analysis

**Forecasts**  
Forecast Discussion  
Activity Planner  
Aviation Weather  
Fire Weather  
Marine Weather  
Severe Weather  
Winter Weather  
Hurricane Center

**Hydrology**  
Rivers & Lakes

**Climate**  
Local  
National  
Drought  
More...  
Local Drought Info

**Weather Safety**  
Preparedness  
Weather Radio  
StormReady  
SkyWarn

## Top News of the Day

- Sheboygan Weather Radio Transmitter Is Down
- March 2012 vs. March 2013 - A Tale of Very Different Temperature Regimes (Updated 3/24/13)
- Drought Has Ended Over Southern Wisconsin
- Additional News Headlines

Watches & Warnings

Observations

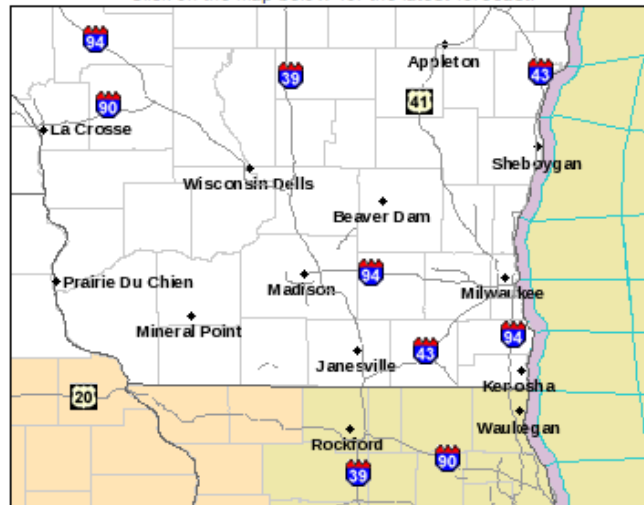
Forecast Graphics

Rivers & Lakes

Climate

Marine

Click on the map below for the latest forecast.



Read watches, warnings & advisories



Small Craft Advisory  
Special Weather Statement  
Hazardous Weather Outlook

Last map update: Mon, Mar. 25, 2013 at 10:11:33 am CDT

Latest Conditions in Milwaukee, WI

Choose Your Front Page City

Mar 25  
9:52 am

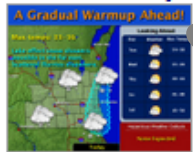


Overcast

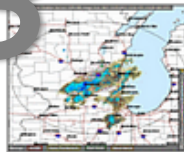
33°F  
(1°C)

Select A City:

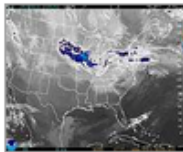
Weather Story



Radar



Satellite



Weather Map





# Mobile Web Services

## Weather Information



# NWS Mobile Weather Website

**National Weather Service**

2 Miles SSE Greenville WI

**Current Conditions**


Appleton / Outagamie  
Lat: 44.26 N Lon: -88.52 W Elev: 919 ft  
Last Updated: Jul 12 2012 12:45:00


**Partly Cloudy**  
84°F


**Wind Speed**  
SE 7 MPH

**Quick Forecast**

11:15 am CDT Jul 12  
Periods 1-3 of 13

**This Afternoon**  
  
Mostly Sunny  
Hi 87°F

**Tonight**  
  
Mostly Clear  
Lo 65°F

**Friday**  
  
Sunny  
Hi 89°F

**Full Forecast**

**Radar**

**Satellite**

**Forecast Discussion**

[mobile.weather.gov](http://mobile.weather.gov)





2 Miles SSE Greenville WI

### Current Conditions

Appleton / Outagamie

Lat: 44.26 N Lon: -88.52 W Elev: 919 ft

Last Updated: Jul 12 2012 12:45:00



Partly  
Cloudy  
84°F

Wind  
Speed

SE 7 MPH



### Quick Forecast

11:15 am CDT Jul

12

Periods 1-3 of 13

This  
Afternoon



Mostly  
Sunny  
Hi 87°F



Tonight



Mostly  
Clear  
Lo 65°F



Friday



Sunny  
Hi 89°F



Full Forecast



Radar



Satellite



Forecast Discussion



Back

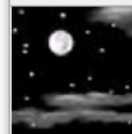


3 Miles SE Evansville WI



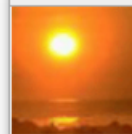
### This Afternoon

Mostly sunny and hot,  
with a high near 91.  
Southeast wind 5 to 10  
mph.



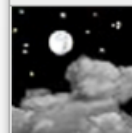
### Tonight

Mostly clear, with a low  
around 62. Southeast  
wind around 5 mph.



### Friday

Mostly sunny and hot,  
with a high near 93. Light  
southeast wind becoming  
south 5 to 10 mph in the  
morning.



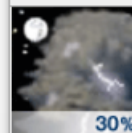
### Friday Night

Partly cloudy, with a low  
around 70. South wind  
around 5 mph.



### Saturday

A 40 percent chance of  
showers and  
thunderstorms. Partly  
sunny and hot, with a  
high near 90. Southwest  
wind 5 to 10 mph.



### Saturday Night

A 30 percent chance of  
showers and  
thunderstorms. Mostly  
cloudy, with a low around  
70. Southwest wind  
around 5 mph.



### Sunday

A 40 percent chance of  
showers and  
thunderstorms. Partly  
sunny and hot, with a  
high near 91. Southwest  
wind around 5 mph.



# Webcams

## Reality Check



511wi.gov/web/cameras.aspx

### WISCONSIN DEPARTMENT OF TRANSPORTATION *Travel Information*

[Drivers & Vehicles](#) | [Safety](#) | [Travel](#) | [Plans & Projects](#) | [State Patrol](#) | [Doing Business](#) | [Programs for Local Gov't](#)

[Milwaukee-area  
current travel  
information](#)

[Travel times](#)

[Freeway  
camera images](#)

[Lane and ramp  
closures](#)

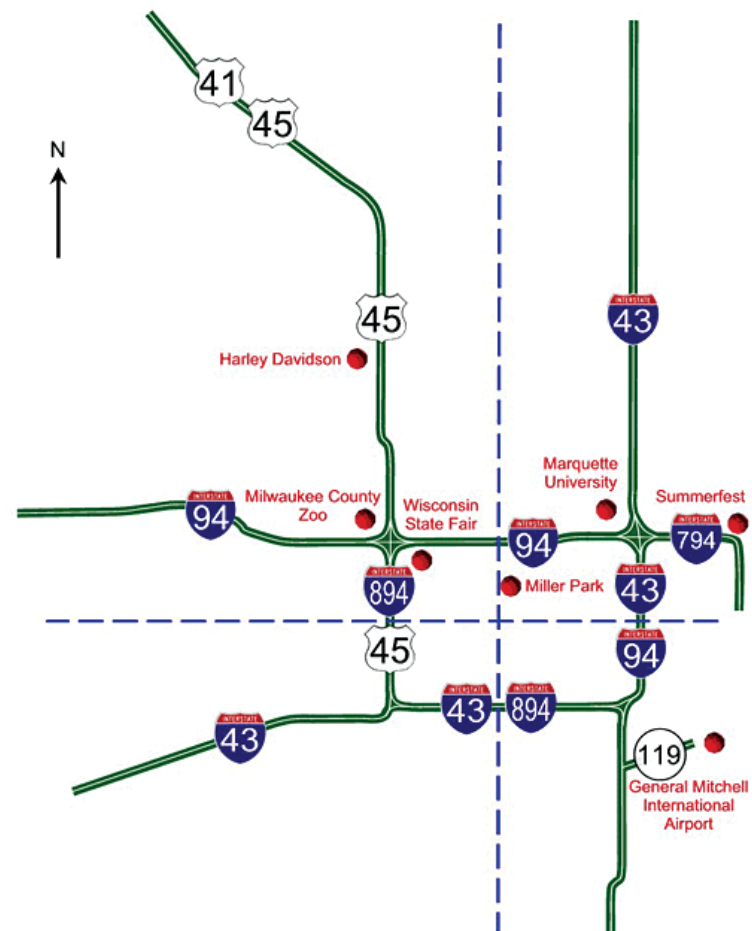
[Congestion  
maps](#)

[Travel](#) > [Travel by](#) > [Road](#) > [Milwaukee-area current travel info](#) >

### Milwaukee-area freeway camera images

Images from the Milwaukee area cameras are available to help travelers check freeway conditions. timestamp appears at the bottom of each camera image.

Select a quadrant below to view the current conditions.



Tuesday, May 12, 2009 10:20:28 AM





# WI Department of Transportation

www.511wi.gov



WISCONSIN DEPARTMENT OF TRANSPORTATION

## Travel Information

[Home](#) | [Traffic](#) | [Transit](#) | [Travel Services](#) | [My 511wi](#) | [511 Projects](#) | [Help/FAQ](#)



[View All Alerts](#)

### ALERTS:

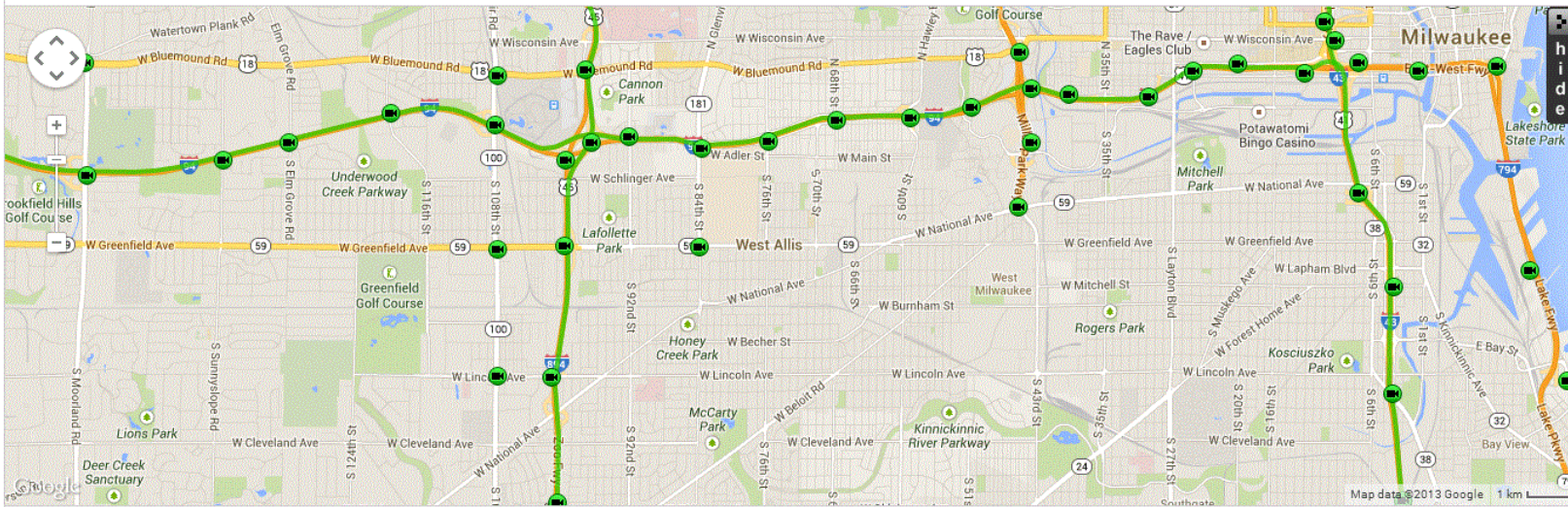
**Brown County-** Law enforcement reports that I-43 is closed in both directions between Atkinson Drive and Webster Avenue at the Leo Frigo Bridge until further notice. Wisconsin Department of Transportation is recommending using the signed detour on WIS 172. I-43 northbound can exit to WIS 172 westbound to US 41 northbound back to I-43 northbound. I-43 southbound traffic can follow US 41 southbound to WIS 172 eastbound back to I-43 southbound.

[Printer Friendly](#)

[Low Bandwidth Map](#)

[Map](#) | [Winter Road Conditions](#) | [Traffic Events](#) | [Message Signs](#) | [Cameras](#) | [Travel Times](#)

Southeast



Check options below to see them on the map:  
\* One can be checked at a time.

- ☒ Winter Road Conditions
  - ☒ Good Winter Driving
  - ☐ Slippery Stretches
  - ☐ Snow Covered
  - ☐ Ice Covered
  - ☐ Travel Not Advised
  - ☐ No Information
- ☐ Traffic Speeds / Travel Times
- ☒ Cameras
- ☐ Message Signs
- ☐ Incidents
- ☐ Lane Closures
- ☐ Future Lane Closures

[Color Options](#)

Last updated on Tuesday, November 19, 2013 at 01:07:59 PM

Winter road condition timestamps are updated only as conditions change.



www.weather.gov/mkx



# WI Department of Transportation

- Mike Adams, Meteorologist
- WI DOT RWIS Program Manager
- [Michael.Adams@dot.wi.gov](mailto:Michael.Adams@dot.wi.gov)
- (608) 266-5004
- Contact him for specific roadway information and conditions

